

**CREATING A RATIONALE FOR A SENIOR CITIZENS
COMPONENT OF THE COMPREHENSIVE PLAN**

by

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Abstract

In the near future, due to the baby boom of the sixties, a large proportion of the American population will fall into the age group of over 65. This dominating portion of the population will naturally require decent living styles and facilities. Most cities in the US, however in their current plan, do not seem to have enough provisions to address the needs of these senior citizens.

The needs and rights of the aged are often found to be not properly addressed as the majority of the population are young and able-bodied and their needs are sure to take priority in formulating any community's plan and policies. Necessary changes in the current plan of many American cities are required to accommodate the needs of the elderly people as the baby boomers age. In this report, an attempt is made to understand and define the needs of the aging population who will very soon form a formidable part of the community.

Of late, aging in place has become quite a popular lifestyle among senior citizens who usually like to spend the rest of their life in the same community as they have spent most of their adulthood or even childhood. Moving out of one's community and learning to adapt to a new environment is hardly desirable for anybody at a ripe age when one would rather lead an easy life by relaxing and engaging in the fond recollections of the past. The report attempts to study the aging components within the existing plan and investigates whether they exist or not and prescribes the required components in the comprehensive plan.

For that purpose, the literature review identifies the needs of the elderly followed by a review of the Manhattan Urban Area Comprehensive Plan to determine how well the city plan addresses the needs of the elderly. The review of this plan provides a critique of the city's plan in terms of its efforts to make the community livable for the elderly. Moreover, the last chapter provides policy guidelines for the development of a specific component of the plan targeting the needs of the elderly.

Table of Contents

Acknowledgements	iv
Dedication	v
CHAPTER 1 - INTRODUCTION.....	1
CHAPTER 2 - METHODOLOGIES AND PROCEDURES.....	11
CHAPTER 3 - LITERATURE REVIEW	13
CHAPTER 4 - REVIEW OF THE MANHATTAN URBAN AREA COMPREHENSIVE PLAN.....	25
CHAPTER 5 - POLICY CONSIDERATIONS FOR AN AGING COMPONENT IN A COMPREHENSIVE PLAN.....	47
POLICY CONSIDERATIONS IN REVISING THE MANHATTAN URBAN AREA COMPREHENSIVE PLAN TO INCLUDE A SENIOR CITIZENS COMPONENT	50
CHAPTER 6 - CONCLUSION.....	80
REFERENCES AND/OR BIBLIOGRAPHY	84

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Dedication

This report is dedicated to my dearest parents and parents-in-law, whose teachings and blessings have been indispensable for my overall achievement up to this point. They are the ones from whom I have learned the most valuable lessons in life.

CHAPTER 1 - INTRODUCTION

Developments in science and technology in the 20th Century have created different living styles, which have fueled the development of a variety of living environments as well as the need for different kinds of physical facilities. Advancements in the medical profession have increased the normal life expectancy of people living in the United States and in other developed countries of the world. The prevailing process can also be defined as the process of "population aging" which is a summary for shifts in the age distribution i.e., age structure of a population with an increasing median age. The causes of this trend may be many. Clearly, advances in medical science and technology have created cures for many of the diseases, which throughout history have claimed lives at earlier ages, thus leading to a decline in mortality rates, which supports a longer life expectation.

According to the US Census Bureau, "The U.S. older population grew rapidly for most of the 20th century, from 3.1 million in 1900 to 35.0 million in 2000. In July 2003, 35.9 million people were aged 65 and older in the United States, or 12 percent of the total population. Among the older population, 18.3 million people were aged 65 to 74, 12.9 million were aged 75 to 84, and 4.7 million were 85 and older. The older population is on the threshold of a boom. A substantial increase in the number of older people will occur during the 2010 to 2030 period, after the first Baby Boomers turn 65 in 2011. The average life expectancy at birth rose from 47.3 years in 1900 to 76.9 in 2000" (U.S. Census Bureau, 2005, p. 1). As a result of this longer life expectancy, there is a need to address the challenges

created by the expanding population in the 60+ age cohorts, and provide services that allow this age group to fully enjoy their “senior” years.

Americans are enjoying longer and healthier lives due to numerous advancements in the healthcare and healthcare facilities, as well as greater economic security and the delivery of supportive services. Fewer than 5 percent of the 65 and over population reside in nursing homes according to the 2000 census (National Association of Area Agencies on Aging, 2007). Most Americans, if given the choice, would likely choose to age in place within the same communities in which they lived most of their life. Contrary to popular belief, only a small minority actually choose to move to warmer climates upon retirement, although the Sun Belt communities have experienced major growth patterns in the past few decades. Impediments to this migratory movement, however, include affordability, as low income “seniors” may not choose to embark on a transition to the warmer climates, or to leave their communities where they have lived the majority of their life (National Association of Area Agencies on Aging, 2007).

Although it can be assumed that many residents would prefer to “age in place”, they confront many barriers to their ability to remain active and be engaged in their communities. Examples include the process of retrofitting their homes to accommodate changed patterns of mobility and use precipitated by the aging process, as well as the ability to travel for health related purposes within their communities. This lack of health and supportive services, safety and security measures, etc. also affects one’s ability to remain a resident in their chosen community. Healthy aging communities promote health across the complete life span and recognize the multidimensional complexities of supporting older adults. After age 85, only one

person in 20 is fully mobile and roughly half of the population over 85 will suffer some type of cognitive impairment or dementia (President's Council on Bioethics (U.S.), 2005). The probability of senior citizens contracting some type of disease or chronic condition increases with age. Those diseases and functional limitations suggest a parallel or increased need for resources in medical care, rehabilitation, and compensatory interventions such as assistive technology in housing.

Thus, housing options should reflect these evolving needs and expectations of the elderly and disabled people living in our communities. The aging process precipitates change in numerous aspects of community living. While we start “aging” immediately following birth, society tends to take care of several life cycles which are encountered from birth up to the retirement phase of our lives. Following retirement, health and abilities tend to diminish or decline, making it often difficult to enjoy the same levels of activity once possible. Similarly, the needs of “senior citizens” change ... no longer do they need what many consider “the American dream” ... a single family two story house with 3 or 4 bedrooms and garage for 2 or 3 cars in the suburbs. Instead, many “seniors” may opt to downsize their residential units in favor of locations closer to medical facilities, or activity centers where reliance on the automobile as a mode of travel is diminished. While in many cases, remaining in their current residential location may have its advantages ... notably cost ... for reasons of health and/or disability they may need to either reconsider their housing choices or to retrofit their house according to their present and anticipated future needs. Elderly residents of a community, who typically want to reside and remain active in their community, generally want to participate in a full range of community activities as do other citizens. The environment should encourage the mobility and

interaction of the elderly and provide for their basic needs such as food, shelter, safety and transportation. Thus, for the aging component of the population the community should offer:

- Appropriate and affordable housing opportunities
- A safe home and community
- Access to necessities such as nearby shopping
- Transportation, including public and volunteer options and
- Accessible health care, medical facilities, and other services

Perhaps the most appropriate way to address the needs of the “senior citizens” of a community and prepare for their participation in the community is through the addition of an element in the Comprehensive Planning Process, just as the CBD or historic structures receive treatment in the comprehensive plan, or parks and recreation, or infrastructure are addressed in the “plan”. It is imperative that planners recognize the needs of the elderly when suggesting strategies for the continued development of the community, and it is just as imperative that local governmental officials provide for “all” of the residents of the community. As noted earlier, when the residents age, they will experience different levels of needs, and may have various health problems which must be considered and dealt with. The problems and the challenges of mobility and accessibility for the elderly should be addressed by the local government and should be clearly defined in the comprehensive plan. Therefore, the planning process should take into consideration the needs of retired and elderly residents in terms of transportation, pedestrian accessibility, emergency services and medical care, library, and various recreational opportunities.

One of the most important aspects of the aging population in the community would be transportation linkages to the activities in which they wish to participate or need to accomplish, i.e. the grocery store, the pharmacy, the health center for medical appointments, the park, the bank, the social security office, or even exercise locations which support rehabilitative activities, etc. The data on older drivers and road accidents shows that older drivers, when compared to those in younger age groups, have relatively few crashes. However, they are at a greater risk of injury and fatality because older drivers have been linked to a number of medical conditions and functional deficits (i.e. deficits in vision, cognition, attention, or physical functioning) which impair their abilities to react quickly to changing conditions. They are more likely to experience difficulty negotiating intersections and complex situations, and are generally more fragile. Visual acuity, as well as reaction time, also diminishes in the aging process, which could impact the ability to continue to drive a vehicle in the community (Baldock et al., 2006). Thus, public transportation is a basic/major element in being able to remain active in the community and able to enjoy their social life as their age increases in their senior years.

The elderly component of the community's population expect to be able to socialize with other citizens, as they did in their earlier years. At times, their physical limitations may not allow them to do so, yet they can be active, vibrant participants within the community's social and governmental structure. They have recreational needs, cultural needs, and transportation needs, not necessarily associated with medical needs. The pedestrian accessibility accommodations in terms of walkways and pathways are one of the most essential factors for their movement within the community. "Walkable" communities are a desirable trait for the senior citizens as such will allow more freedom and safety without imposing the risk of vehicular

conflict. However, design considerations in terms of creating smooth pathways/surfaces, as well as slope considerations for wheel chair movements are essential. Physical disability is perhaps the most dominant factor to consider when people age in the United States and elsewhere, thus to achieve a “walkable” community the “plan” must incorporate better design standards which address these issues, and incorporate standards which allow for wheelchair movement, seating places for relaxation and social interaction, and handicapped accessible restrooms. Connectedness to other destinations such as health care centers, recreational centers, movie theatres and auditorium events, churches and spiritual places, libraries, etc. are also essential factors that should be addressed in the comprehensive planning process for the elderly.

The aging of the population will likely have a dramatic impact on America's cities and counties in the twenty first century. At the moment (2008), providing traditional aging services such as senior homes and home care are not the sought-after solution. To respond to the rapid rise in their aging population, communities need to reassess their policies, programs and services in the areas of transportation linkages, accessible housing, parks and public places, age appropriate fitness programs, as well as other opportunities that create the “livable” community. Although those services target an aging population, they also improve the quality of life for all ages. The aging population will likely be affluent and have “political clout”, and their numbers will likely represent a significant proportion of the community population. However, many communities are not currently addressing the housing and mobility needs of an aging population. While some communities within the New England and Pacific Coast regions have developed programs to address the needs of older adults, very few have undertaken a comprehensive assessment of what it would take to make their communities "elder friendly" or

to attract seniors in their retirement years (National Association of Area Agencies on Aging, 2006). There are some holes within the comprehensive plan in most of the communities of the United States, which does not address the needs of the older adults. They are more specific to the general population. These needs of older adults are different from that of the general population, and as a result, may require a completely new comprehensive approach. Communities need to address their existing policies, programs and services to determine whether or not the needs of their aging population are being met. The purpose of this report is to identify those needs of an “aging” population and to develop a prototype component of a comprehensive plan which community leaders could initiate in planning for the future. Such can improve the aspects of life of the older adults in the community as well as strengthen the overall appeal of life in their community.

Problem Statement

The problem is not unique, nor has the need emerged overnight. In earlier years, the elderly population component (those over the age of 65) did not constitute a significant proportion of the population in the communities to warrant specific study. As a result, the comprehensive plan failed to address their issues or was not able to address the needs of this segment of the population. However, the growth in the population over the age of 65 in the U. S. indicates that this group is becoming a major proportion of the overall population, and will continue to expand in the twenty-first century, thus should be recognized in the planning effort of a community as they prepare for the future. The needs of this older population group are different from other people because the aging process typically creates difficulties that are health related, and potentially impairs an individual’s mobility pattern. For example, providing housing

will not be sufficient if residents are unable to travel to receive basic services such as medical assistance or to attend appointments with their doctor, or to go to the grocery store, to the shopping center or to participate in recreational activities of their choice. These interdependent needs of older adults may require a completely new approach in the preparation of a new comprehensive plan element or component. For the reason, there is a need to look at existing policies, programs and services within most communities.

The study of how the physical and health condition of older people differs when they age and what changes are necessary to accommodate the aging process is important. For example, the condition of walkways or sidewalks within the community are less important to those citizens who are not physically impaired, but more important to an elderly citizen who is confined to a wheel chair or must use a walker for purposes of stability. Therefore, to make the communities elderly friendly and livable for “all” age groups, the comprehensive plan must address those things that benefit the elderly population as well as all other citizens. Some cities have attempted to address elderly concerns in the housing element of the comprehensive plan, and have included a paragraph or two about the recreational needs. However, naming them as recreational needs and adding one or more element for their benefits will not be sufficient.

Senior citizens, when they age, may want to stay in the same home within the same community, they usually do not want to go to the retirement center, because they are emotionally attached to their home where they had been living for several years. However, they find it difficult staying in the same community if the community planning approach is not “fitted” to their changing lifestyle. If they do not find their basic needs within an accessible distance with

safe and easy walkways/pathways or they do not have accessible public transportation, they may have to move from that community unwillingly. There is a definitive needs assessment and implementation strategy for the inclusion of the elderly in the comprehensive planning effort. Thus, creating a distinct “senior citizen” component of the community plan is essential in all future planning efforts.

Purpose of Study

The main purpose of the study is to define a “livable community” and develop guidelines which will meet the needs of the various age groups residing in the community, with specific emphasis on the needs of the “elderly” members of the community. In the meantime, the study will provide insight into the development of an element within the comprehensive plan that embraces the aging component of the community, just as do other elements, which addresses such specific things as the CBD/downtown, or historic preservation, or transportation plan, etc.

The study begins with identifying the problems of the aged in a community. The amenities in a community are, most of the time, not favorable for these senior citizens. People in their latter years develop various medical and physical conditions and therefore find huge difficulty having to adapt to an environment that is designed with a typical young adult in mind. These people certainly need some extra care and consideration. The main task of the study is to point out the existing anomalies and suggest ways to remove them so that the community can be livable for the elderly.

Problems faced by the elderly in the community also spring from the biasness and defects in the policies. Inattentiveness toward the needs of the elderly in a city's laws and policies also poses problems in day-to-day life of these special people. Manhattan Urban Area Comprehensive Plan is chosen for the study. The relevant statements and clauses in the city's plan will be discussed. The purpose of study seeks to answer how the problems relevant to making the elderly more comfortable in the community can be accommodated in the planning process. In addition, to provide a prototype element that if added to any comprehensive plan will work for making communities livable for all age groups.

CHAPTER 2 - METHODOLOGIES AND PROCEDURES

Growth of the aging population in the United States over time will be documented from different research initiatives through the use of a literature review. The general needs of the elderly component of the population will be determined using current literature searches on the subject. At the same time, the physical changes that a person undergoes as the aging process occurs will be studied, and changes in their needs will be determined based on a review of the literature. An aging population confronts many more barriers than other people when they want to socialize within the community potentially due to illness, vision problems or being handicapped. Thus, those barriers need to be identified along with determining what activities or things they want to be able to achieve. Those elements then could be addressed as components of the comprehensive planning process to make the living environment of senior citizens livable and friendly. Based on the research above, proposed guidelines that should be addressed in a comprehensive plan will be outlined which will allow the aging population of the community the opportunity to participate in the community's activities or simply make their community "livable" for each and every citizen regardless of age.

After reviewing the literature, one typical comprehensive plan (here Manhattan Urban Area Comprehensive Plan) of the United States is taken and each section of the comprehensive plan is reviewed. The review of the comprehensive plan will point out different components within each section such as housing, land use, transportation and so on. Then it will discuss if those components are suitable for elderly people according to the literature review. It will also identify the components whose slight modification will go a long way in making the communities livable

for all age groups and also list those which are completely missing in the comprehensive plan to accommodate elderly citizens.

Then last part of the report will be presented as a rewritten version of the same comprehensive plan (i.e. Manhattan Urban Area Comprehensive Plan) which would be reviewed in earlier sections with some suggestions and addition of the components that would make the communities livable for all groups including the elderly. Those additional components along with the components that already exist will be outlined as a prototype element for each comprehensive plan in the United States. The prototype element will act as guidelines that could make the community accessible to all age groups which support access by the elderly or disabled. Policies regarding connectivity to residential sites, healthcare facilities, food stores, and public places will be identified for all age groups including the elderly and disabled residents. The prototype element will point out the aging components of society and other citizens in a safe and easy manner in the comprehensive plan in terms of walkways and pathways (walkable communities), public transportation (mobility), and recreation and outdoor spaces (parks and open spaces) etc. It is the intent of this report to create guidelines/policies that should be addressed in a comprehensive plan in terms of providing mobility to different activities of daily life in support of the needs of senior citizens wanting to “age in place”.

CHAPTER 3 - LITERATURE REVIEW

AGING OF AMERICA ... “Demographics”

America and its communities are aging, as the “Baby Boom” generation, born between 1946 and 1964, reaches retirement age. The number of Americans over age 65 is expected to reach 71.5 million by 2030- twice their number in the year 2000. By the year 2030, one out of every five people in the nation will be an older adult (National Association of Area Agencies on Aging, 2006). As noted by the Population Reference Bureau, “The U.S. is getting bigger, older, and more diverse.” (Shrestha, Library of Congress, & Congressional Research Service, 2006)

According to U.S. Census Bureau projections, the elderly population (over age 65) is projected to be 86.7 million by 2050. The oldest-old population (those aged 85 and older) is also projected to double—from 4.7 million in 2003 to 9.6 million in 2030—and to double again to 20.9 million by 2050. In the 20th century, the growth of the older population was substantial. In 1900, people 65 years of age and older numbered 3.1 million people. In 2000, there were 35.0 million people in this age category or cohort ... 11 times as large as it was in 1900. During the same period, the total U.S. population increased from 76.0 million to 281.4 million ... which equates to a growth factor of 3.7 times as large. The growth of the population under age 65 was similar to that of the total population, growing from 72.9 million in 1900 to 246.4 million in 2000, or 3.4 times as large. The older population increased at an average annual growth rate of 2.4 percent during the last 100 years (U.S. Census Bureau, 2005).

THE AGING PROCESS ... “Concerned Issues”

Life expectancy is increasing dramatically throughout the world, more visibly in developed countries, because of increasing elderly populations. “To design for older people requires an understanding of how the aging process can affect the way in which older people perceives, interprets, and negotiates the environment. It also demands an understanding of what it means to grow older in our society” (Carstens, 1993, p.10). Although the increase in life expectancy during the first half of the 20th century was primarily due to targeted public health measures, later life expectancy increases were due to medical advancements and technological improvements. Still the elderly contract various kinds of health problems that need to be taken into consideration in making a community livable.

The second issue related to elderly concerns in a community is housing. Sprawl is not suitable for the elderly because it is hard for them to travel a long distance to satisfy their needs and enjoy their life. They need their activities around them within a short distance. Beside grocery and pharmacy stores, they also need parks and other recreational activities near their homes making their “used” community more reachable for various amenities. Therefore, elderly oriented communities should embrace mixed used development strategies where most of the basic needs and recreational activities are within walking distance or are connected by public transportation access.

The third issue related to creating elderly friendly communities, touched briefly above, is the mobility patterns desired within the community, which plays an important role in connecting them to the various activities available and to which they desire to participate. Most of the

elderly do not walk due to disabilities or fear of falling and have lower endurance levels, however, they still prefer to live independently on their own as long as humanly possible. For this reason, community planning should address those issues such as making pathways smooth with proper slopes and grades, etc. Many of the elderly have experienced a loss of visual acuity as well as diminished hearing, however they still want to fulfill their needs on their own. For that reason alone, public transportation is most essential. The elderly population typically needs greater access to health care facilities, thus easy access to healthcare facilities are extremely important. At the same time, the elderly population will have more leisure time than in their working years, therefore, easy access to the various recreational and social activities are essential. If the city does not address all the above-mentioned issues and provide necessary facilities, elderly citizens may choose to relocate either to a retirement center or nursing home, or move to a different place of residence where these facilities may exist. Therefore, the community planner must begin to look at the health issues of the elderly and associated needs as a component in each comprehensive plan to encourage or allow the “aging in place” concept to work.

Health Issues

Aging is a phenomenon that happens to all persons throughout the course of their life. Aging to all persons, means adaptation to a series of subtle and/or critical changes in social and functional roles, physical health, sensory acuity, and physical ability (Carstens, 1993, p.10).

Disability occurs due to various factors ... the first of which occurs when people age and their organs are less flexible and more rigid, which leads to a variety of dysfunctions including

decreased strength, agility and rate of recovery after exercise, slowing of the rate of function of organs, and risk of osteoporosis. Falls are likely to become more frequent and to be more dangerous (Haber, Blank, Council on Tall Buildings and Urban Habitat, & Committee 56, 1992). The report “The Blueprint for Healthy Aging in New Jersey” published by the New Jersey Department of Health and Senior Services suggests that one of the most successful strategies in preventing and reducing falls lies in developing strength, balance and flexibility through continual exercise, which in turn can reduce the risk of falling. The report further explains that there is no drug that can match the overall health benefits of regular physical activity. Regular physical activity lowers the risk of premature death, high blood pressure, diabetes, some types of cancer and the risk of falls and fractures. Regular physical activity also insures faster recover from an injury. Many seniors have an increased chance of developing chronic illnesses and disabilities when they age however regular physical activity can help them live active, independent lives (National Association of Area Agencies on Aging, 2007).

The **first** component of a comprehensive plan that is essential in addressing the health issues of the elderly can be termed as a **Recreational Component which could encompass a recreational center and park/open spaces for passive recreational needs**. A recreational center within the community is important where elderly can perform their physical activity/exercise even when weather outside is not favorable. In addition, the park and open spaces element, (including walking trails and benches) within the community attract older citizens and allow places for resting. Even the person in a wheel chair can roam around the park if the pathways are smooth enough and slopes are comfortable for wheel chair access. The engagement with the natural environment and the provision of “company” to other regular

members of the society will help the elderly to reduce or mediate the feelings of loneliness that are often experienced as the individual ages. A facility such as a park system with recreational services can provide the resident with the opportunity for personal expression, services to others, a feeling of belonging, accomplishment, new experiences, continuation of past activities, and community action involvement. The natural and enclosed environment with lots of common spaces can help the elderly to overcome the loneliness, isolation, and dependency that sometimes result when they retire from the work environment (Green, 1975). Therefore, providing environments which encourage social interaction with other member of society (both the young and the old), such as within various recreational places, will create a mutually satisfying participatory environment for all ages of residents within the community. It is essential to embrace a “living cooperative environment” in all communities as a natural component of the planning process.

As mentioned earlier, the elderly are typically at a greater risk of suffering from acute and chronic diseases...and other diseases as they age. The need for **Health Care services and Hospitals** represent the **second** major component which should be addressed in the comprehensive plan. Access to preventive services such as immunizations, screenings and wellness programs are essential to promote the livability of a community, which encourages aging in place. Access to health care can relate to the proximity of health services, which is a major issue because some older adults have difficulty in driving due to their disabilities associated with hearing or vision, or even physical limitations which reduce ones ability to operate a motor vehicle. Coupled with the availability of needed medical facilities, is the need for **Public Transportation** to access those medical facilities, which is the **third** component

needed in a comprehensive plan for facilitating “aging in place”. The elderly population must have a method of connecting to the basic medical facilities of a community (National Association of Area Agencies on Aging, 2006, p.7). Public transportation, if available, will allow for movement to places such as the doctor’s office, hospitals, health/exercise locations, community centers, libraries, banks, grocery stores, etc. If such public transportation is not available, aging in place will be difficult, if not impossible. The elderly population ... those over age 85 ... tend to approach driving on the roadways with a little more apprehension given their potential loss of visual acuity, hearing, and/or reduction in reaction times should danger appear that requires immediate action to avoid a collision. If they cannot see, they cannot drive, but they can use public transportation if available, find their essential needs, and reach their destination. Public transportation becomes a necessity in support of the “aging in place” concept.

The report “Maturing of America” points out that “reduced mobility can put an older person at higher risk of poor health, isolation and loneliness. Like the majority of American adults, older Americans rely on private automobiles to meet their mobility needs. However, the physical limitations that come with age may overtime restrict or eliminate an older person’s ability to drive. Many older adults who cannot drive can still live independently if they have access to available, adequate, affordable and accessible public transportation”. The report also recommends that communities should offer driving assessment and training to help older adults remain safe on the road when they travel. At the same time, communities should also consider improvements to roadway design such as large print road signs, grooved lane dividers, dedicated left turn lanes and extended walk times at pedestrian crosswalks to accommodate older drivers

and pedestrians. Local governments should also promote public transportation systems and formulate some regulations that address the needs of an aging population (National Association of Area Agencies on Aging, 2006). State and local transportation departments have found that relatively minor improvements have measurably reduced crashes. These improvements include brighter stoplights and pavement markings, larger lettering on street-name and directional signs, protected left-turn signals, and converting two-way-stop intersections to four-way-stop intersections (National Association of Area Agencies on Aging, 2007).

Overall, public transportation with safer roads and comfortable community environments will encourage the elderly movement within their communities. Most of the time seniors want to “age in place” however they must confront many barriers to meeting their basic needs such as access to medical and grocery stores, health centers, recreational centers, banks, churches, etc. Most of the time even if they want to age in the same home or in the same community, they must move to other places to increase their capability of remaining a participant in community life. Public transportation is a major key to allowing a community to be home to all ages when physical infirmities of the elderly threaten their independent life style.

Though medical advancements have changed the patterns of illness and elderly people are living healthier lives today in the United States; at some point in our life cycle, there is an “end” point which bears mentioning, and it can occur at any age. Some illnesses are terminal, and there is a recognition that “aging in place” doesn’t become a reality for everyone. Special challenges arise for patients suffering from the various age-related dementias, especially Alzheimer’s disease, a condition whose prevalence is now high (an estimated 4.5 million

sufferers in the United States) and increasing. This progressive, degenerative, and fatal disease, lasting typically between five and ten years, begins with weakening memory and everyday forgetfulness, moves to progressive loss of basic life skills, speech, and self-awareness, and concludes with severe bodily breakdown, in total dependence on others for all activities of daily life. Here, aging in the same home or community where seniors have been living for several years may not be possible. Therefore, the **fourth** component to be added to the comprehensive plan is **Nursing Home or Assisted Living facilities**, where special caretakers will provide various aspects of health services and basic facilities to those elderly who are generally totally dependent or becoming dependent on a caretaker for the rest of their life (President's Council on Bioethics (U.S.), 2005, p.207). Associated with this particular need, is also the provision for what could be called the **Day Care Center** which can provide for elderly day care as an assistance to families which try to provide assisted living capabilities for family members in their later years of life. In some cases, family residences can be retrofitted or adapted to house elderly parents, however the necessity of working presents the need to leave their parents during the daytime hours or for some small periods of time when they have to go to other places for attending meetings, conferences, or for some other purpose. Day care centers, where the elderly can spend their daytime hours, make friends, do activities in group settings, and return to their home with family in the evening and weekends will make their life precious and enjoyable. In many cultures, taking care of an aging parent or parents by their children is considered the “norm” and is expected ... sort of a “pay back” for taking care of children in their early years as family members. While it was a full time job in those years, taking care of an aging parent can become a full time job as they age, along with typical work related aspects of earning a living to support the family. Occasionally, a vacation is needed for family sanity reasons, and the

“Elderly Day Care” centers become a true necessity. This area is often overlooked in the community planning process, thus should become an element or component of the “aging in place” aspect of the comprehensive plan.

In summary, the following represent elements which should be addressed in any comprehensive plan to facilitate “aging in place” for seniors seeking to remain in the same community where they had been living for several years. **The presence of these components leads to the acknowledgement of the community’s desire to support the “aging in place” concept for its senior citizens.**

- Access to Recreational Centers
- Development of both active and passive Parks and Open Space
- Public Safety/Emergency Services
- Provision for Hospitals and related Healthcare Facilities
- Availability of Nursing Homes/Elderly center
- Provision of Day Care Centers and support centers for the Elderly
- Access to Shopping/ Groceries/Banks and Pharmacies
- Availability of Aging and Human Services programs
- Church/Congregational places for religious activities
- Access to Public Transportation
- Usable Pathways/Walkways

The “Housing” Issue

The needs and expectations for housing accommodations change with the age of the owners or residents. The first concern experienced by the elderly choosing to “age in place” within the same community is leaving their own home and “downsizing” so to speak. Aging creates many problems for the seniors in their daily activities, and quite often the home itself creates a number of difficulties. Most of the time residential housing targets young and healthy adults ... builders do not take into account age-related conditions such as reduced mobility, vision, hearing problems and so on. Hence, most dwellings do not support the physical and sensory changes that older adults encounter as they age. At the same time, seniors have likely “customized” their home and generally want to live in the same home where they had been living for several years. Leaving their home means leaving behind a potentially comfortable setting and many memories. In addition, they generally feel a certain amount of control within their own home that provides the feeling of security, and independence, along with a sense of dignity, and quality of life which they do not want to lose in their later years (seniorresource.com).

Seniors most of the time have to move to other communities, retirement center, elderly homes, senior living centers and so on to fulfill their needs.

“Seniors prefer to remain in their communities. Rather than move to a new community, even one that might be more physically suited to their needs, the vast majority of older adults prefer to stay right where they are. Changing healthcare needs, loss of mobility, financial concerns, home maintenance and increasing property taxes, however, present significant impediments to this simple and primary desire.”

(Ball, Scott, 2000)

One detriment to “aging in place” may be the internal physical design that may not support the ability to stay in the home. For example, older two story homes typically had one bathroom located on the second floor of the house between the bedrooms. Aging may make climbing stairs a physical challenge for the resident. Newer homes of today typically have several bathrooms located on all levels of the house which today may no longer represent a challenge to “aging in place”. Retrofitting an older two-story house could represent a financial challenge as well as a physical challenge in redesign. Relocation of the elderly to a newer residence “ranch style house” may be the only alternative to meeting their mobility needs as one ages. Disabilities often require wide doors and hallways to support the movement in a wheelchair or with walkers. In that situation, if the home design does not support level flooring and handicapped accessible rooms, the elderly may have to search for other housing that meets their needs or elect the expensive process of remodeling their current home. However, getting home design right the first time or enforcing codes with small modifications in the house with grab bars, improved lighting, main-floor bathrooms, wider walkways and doorways will provide flexibility to anyone if they want to age in the same home later in their life. Unfortunately, everyone’s life cycle changes as we age ... and needs change as well. Purchasing handicapped accessible housing when starting a family is typically more expensive than meeting the basic needs at that point in time, and having four bedrooms and three bathrooms and double or triple car garages tends to make more sense ... thinking of retirement and aging in that particular house is not a common concern of the individual when their ages are in the 20’s and 30’s.

Another concern which restricts seniors from “aging in place” is connectivity from home to other basic needs such as the grocery store, health and medical facilities, recreation centers,

parks and open spaces, etc. Many elderly residents cannot drive, and are dependent on public transportation to reach their destination. While a “walkable” situation may be desirable in the earlier senior years, at some point, even walking may represent a formidable challenge. Creating a used developments which support walking as well as wheelchair access seems like a logical alternative for senior living as long as second story access via elevators or automated stair lifts are provided for the residents.

CHAPTER 4 - REVIEW OF THE MANHATTAN URBAN AREA COMPREHENSIVE PLAN

The first chapter “Planning Process” is a complete review of Manhattan Urban Area Comprehensive Plan. It states,

“The plan is a joint work of the City of Manhattan and Riley County. It has been amended several times to reflect the changing needs and aspirations of the community. This updated Comprehensive Plan incorporates current issues and policy recommendations, as well as those of numerous City and County policy plans into a single document. The Comprehensive Plan does not replace other recently developed and adopted plans and policy documents, but seeks to better integrate them. Some of the existing plans and policy documents that have been integrated with this Comprehensive Plan include the Gateway To Manhattan Plan; Growth Vision; the Manhattan Urban Area Transportation Strategy (MATS); Housing Manhattan: A Five Year Housing Strategy; and the Downtown Tomorrow Redevelopment Plan. This Comprehensive Plan ensures that the needs of the growing community will be addressed, and that appropriate guidance is provided for future decision-making on issues such as land use, growth management, community design, natural resources and the environment, historic preservation, regional coordination, housing and neighborhoods, transportation, infrastructure and services, and economic issues.”

(City of Manhattan & Riley County, 2003)

The overview of the revised comprehensive plan does not have a definite section that addresses the concern of the elderly in the planning process. However, it ensures the needs of the growing community in different issues and policy recommendations; detail study of the comprehensive plan is required to find out whether it addresses concerns of the elderly on different sections of the chapter within the comprehensive plan. It has also mentioned in the

overview that it will incorporate the current issues and intends to provide policy guidance for approximately the next 20 years. The most important issue in coming years will be planning concerns for the elderly, as they will account for the majority of the overall population excluding the student element in the “Plan”. Each community will have a large portion of the population as the elderly in coming years and most of them want to age in the same house or within the same community they have been living. Manhattan will also follow the same trend, so it should address the elderly components in its revised comprehensive plan. If not, the comprehensive plan will need to be updated to serve that population. The following paragraphs will look for those elements in different chapters of the comprehensive plan of the city of Manhattan:

- The existing components that are essential for the elderly wanting to age in place
- The components that does not fit but with a few modifications to it will make the community livable for those wanting to age in place
- The missing components that are the most essential for people wanting to age in place

Chapter 2 is the executive summary of the community’s vision for its future that is helpful for making goals and guiding principles for future growth and development of the community. The base of such goals depends on components such as environmental, economic and social considerations. Those components are termed as interrelated and essential for continued health and sustainability of the community. Therefore, the comprehensive plan of Manhattan should focus on social issues such as that of the elderly wanting to age in place. According to the last census, the projected population of the elderly will be dominant in coming years and they certainly want to live in the place where they have been living for several years. Most of the time, seniors move out of the community because the planning approach is not supportive

enough to serve their mobility in the community. A national survey conducted by AARP(American Association of Retired Persons) found that, “Eight nine percent of persons age 50 and older want to remain in their communities, which is consistent with actual migration patterns. During the past two decades less than ten percent of those age 60 and older actually changed their county of residence. But not all communities are built equal when it comes to their design for supporting successful aging. The lack of, or negative perception of, community features such as sidewalks, transportation alternatives, and affordable housing is linked to lower levels of community engagement and lower indicators of successful aging”(A. Kochera, Lynott, & Hodder, 2007). In that case, they are unable to function within that community because of several reasons such as accessibility to daily needs and health care facilities or even to entertainment or recreational activities. When people age, they are usually retired from work and they have more leisure time, so they want to engage in recreational activities. However, most of the time, they feel hindered because the community’s planning approach with the general population in mind is not suitable for those aging in the community. The comprehensive plan of Manhattan should target this population; the plan should work for an aging population and provide a livable/caring community for them.

The first chapter of the Manhattan Comprehensive Plan talks briefly about the vision guided by key objectives directing the comprehensive plan, and then later, an individual chapter explains those objectives. Some of the key objectives noted that are concerned with aging are:

1. A Coordinated and Efficient Pattern of Growth
2. Efficient Use and Expansion of Public Facilities and Services

3. A Balanced Multi-Modal Transportation System
4. Stable, Cohesive Neighborhoods Offering a Variety of Housing Types

These issues relate to the development of aging components in the comprehensive plan making the community livable for all age groups. Review of those key objectives in Manhattan Comprehensive Plan does not explain any concern towards the aging population. However, a detailed review of different chapters does show that the planning approach can accommodate all age groups with addition or modification of some components within the comprehensive plan.

As mentioned earlier, the first key objective of Manhattan's Comprehensive Plan that relates to aging is, **"A Coordinated and Efficient Pattern of Growth"** which refers to a compact development pattern within the Manhattan Urban Area. It encourages growth to locate within the Urban Service Area Boundary that fosters an efficient provision of infrastructure and services balancing its overall development. The explanation of a compact development pattern, though, is not clear in this section of the chapter; however, a compact development pattern does help people wanting to age in place. For example;

- A "compact development pattern" is useful for the elderly because they will find their daily needs and activities within the shortest distance. Their health condition will not allow them to travel long distances but they might access it if those are available within an approachable distance.
- At the same time, a compact development pattern should incorporate elderly components such as grocery stores, and health care facilities within the shortest distance. It should incorporate parks and open spaces within a walkable distance. Walkable not always

refers to human walkways, and an easy access for wheel chairs is equally important to incorporate the needs of the aging population in the comprehensive plan. Particularly, mobility and accessibility within a compact development pattern are major issues that make the neighborhoods livable for all age groups and later, this report will discuss those issues.

The fourth chapter “Land Use and Growth Management” deals with the first and fifth key objectives, namely, “A Coordinated and Efficient Pattern of Growth” and “Stable, Cohesive Neighborhoods Offering a Variety of Housing Types”. Therefore, review of this chapter is essential in learning whether or not the neighborhood-planning process concerns the aging population in the Comprehensive Plan. The background and intent of the chapter states,

“Growth brings a number of benefits to a community; however, it also brings a number of impacts and costs. To help balance these factors, the City and County seek to promote an urban development pattern that represents the sustainable use of land, energy and other resources by encouraging orderly, contiguous growth and minimizing single-use or low-density, dispersed development”.

This chapter identifies a series of goals and guiding principles that represent the community’s values and its vision for the efficient use of land. **The first goal promotes compact development/high-density development** with a mixed used concept rather than dispersed low-density development. Compact development seems like a better planning approach for the elderly because it helps to find daily needs and perform daily activities within the shortest possible distance. **The second goal strengthens and promotes downtown Manhattan**, as the City’s primary business, office, governmental, and cultural center. Promotion of these elements within the Comprehensive Plan will make the community livable for all age groups. Even senior

citizens can participate in various activities if those are available within an approachable distance. The goals and objectives of this chapter does not express any explicit concern for the elderly, though there are some components mentioned in the chapter which is supportive of the elderly wanting to age in place. For example;

- The Manhattan Comprehensive Planning promotes cluster development as an option to protect environmentally sensitive areas and provide common community open space. Common open space with natural environment within the community helps the elderly to participate in activities that they have been doing before. Their physical or health conditions will not support them to perform those activities when they age, but if they can take part in it as viewers, they may be satisfied. They want to feel like a community member or a part of that community and common open space will help them to reunite with others in their leisure time. Connectivity from home to open space (which is another important factor) is not very clear in this chapter; later, the report will discuss those issues after the review of other sections of the comprehensive plan.
- The planning promotes downtown businesses, offices and cultural centers and wants to redevelop, rehabilitate and revitalize the downtown. Promotion and revitalization of downtowns help the elderly to participate in various activities within those areas. It is a recreational hub where people spend their leisure time and if it is in close proximity, seniors will use downtown as a recreational area. At the same time, various offices such as insurance offices, the post office, banks, etc. related to daily use are located downtown which will enable the elderly to do their own work. On the one hand, neighborhoods

close to downtown and seniors who could have reached there on foot or in a wheelchair cannot do so because of poor sidewalk conditions. On the other hand, neighborhoods a little distance from downtown cannot reach there due to lack of proper transportation, if they are disabled or their health conditions do not allow them to travel on their own. Therefore, the Manhattan Comprehensive Plan can address elderly needs but connectivity and mobility from neighborhood to downtown needs to be determined and perhaps improved; the latter part of this report will discuss those issues.

The fourth chapter also talks about “Land Use Policies” which is one of the most important factors needed to make the community livable for all age groups including the elderly population. Land Use Policies explain policies for both residential and commercial districts. There are three categories (Low/Medium Density Residential, Medium/High Density Residential, and High Density Residential) of urban residential uses within the Future Land Use Map based upon the City’s existing land use categories from the 1991 Comprehensive Plan. The Manhattan Urban Area Comprehensive Plan incorporates the policies that intend to create diverse neighborhoods with a variety of housing types and an array of services, such as shopping, schools, and parks. This, on the one hand, will create a livable neighborhoods and, on the other hand, will meet day-to-day needs of residents within a close proximity. The planning policies focus on walkable communities and promote opportunities for residents to walk or bicycle to nearby services and gathering places. It helps to reduce the need for cross-town vehicle trips and makes the community more friendly and livable. Despite this emphasis on more diverse neighborhoods, if some existing communities do not support mixed-use development, then policies will not be forced. Instead, neighborhood-level master planning will be provided to help them retain their needs.

However, for the new development, the Comprehensive Plan encourages walkable, mixed-use neighborhoods. The policies talk about the harmony between a variety of housing types and commercial services and suggest compatibility in design character in terms of scale and location. It suggests that mixed development should have a focal point that includes neighborhood-scale retail and services, public and institutional buildings such as schools, daycare facilities, community centers, places of worship, parks and open space. It also suggests having a focal point with all those facilities and different neighborhoods surrounding the focal point. The connectivity from the focal point to the surrounding neighborhoods play a major role in the planning process if the comprehensive plan targets or is concerned about the elderly population. The Manhattan Urban Area Comprehensive Plan does not explain the connectivity in detail. It simply talks about neighborhoods connectivity with the collector and local streets, sidewalks, pathways and bikeways. The Manhattan Comprehensive Plan suggests mixed-use development as a new residential planning approach. This approach is the most important planning process for the new development to incorporate elderly citizens in the comprehensive plan. This chapter suggests mixed used development but does not clearly explain the connectivity patterns from neighborhood to those focal points. Connectivity is the most essential area to be discussed to fit the elderly wanting to age in place. For example,

- The Manhattan Comprehensive Plan suggests mixed-use developments for a new residential neighborhood development. Mixed-use neighborhoods should always create and invite attractive destinations for all users including all age groups. However, the Manhattan Comprehensive plan does not talk much about the connectivity within mixed-use development but still mixed use plays a major role to make the neighborhood livable

for all age groups. Connectivity includes both pedestrian movements and vehicular movements. To promote the pedestrian movement, buildings should be oriented toward a defined pedestrian walkway or street. Pedestrians should be able to easily identify primary entrances into commercial areas. The design of access and circulation should tie the development into the overall neighborhood creating opportunities for nearby residents to access different services either on foot or by bicycle or some alternate form of transportation.

- New mixed used development does not link with the topic aging in place because aging in place is not creating a new development, but rather, making the same community fit for the aging component of the population. However, the Manhattan Comprehensive Plan suggests linking new mixed-use developments with existing developments. This will be a good idea if there is no possibility of providing all the services to the existing neighborhoods but still can access those services from neighborhoods adjacent to them. It will make the old neighborhood livable for all age groups because mixed development will have every element needed for day-to-day life within the same neighborhood. This will benefit the senior citizens a lot because other age groups can still use the services if they are available at longer distances, but the aging people cannot commute far due to their physical conditions or disabilities. Therefore, seniors move out of the community to retain their living or to survive in the place where they have access to basic needs in the shortest possible distance, with the convenience of walking or traveling in a wheelchair. However, if they can use those services within a short distance which is out there in the

next neighborhood, the old neighborhood will also survive and will become livable for all age groups.

- Even if two neighborhoods link together, the connectivity from the old neighborhood to a new one or to different services within the new neighborhood is the most crucial factor to be discussed in the comprehensive plan to make the community livable for all age groups. This portion is not clear in the Manhattan Comprehensive Plan. The plan mentions that a system of collector and local streets, as well as sidewalks and pedestrian and bicycle pathways should internally serve the neighborhoods. It also suggests that planning should include a network of direct and interconnected streets, pedestrian and bicycle connections. It mentions that neighborhood streets and access roads should follow the natural contours of topographic features to minimize slope disturbances, maximize scenic views, and conserve natural features and vegetation. Still, the information regarding connectivity is not clear enough if those streets and pathways are meant for the disabled and elderly. Connectivity does not always mean providing roads, pathways or sidewalks but different issues related with it play a major role if the neighborhood is meant for all age groups.

- Components such as signage and crossings in road, slopes/ grades and use of material in pathways and walkways play a major role if it is meant to accommodate the elderly and disabled. Neighborhoods near downtown Manhattan do have walkways but they are so poor in condition that even a healthy person may have difficulty walking on it; pathways have many potholes making wheelchair accessibility difficult. Therefore, a proper slope

or gradient is the most essential factor for easy wheelchair movement, if the community wishes to recognize the needs of its senior citizens. Even positioning a bench at regular distance intervals adjacent to the sidewalk can play a major role because seniors cannot walk a long distance without resting. The planning consideration should always give comfort to the disabled and the aged whose number will likely dramatically increase in each neighborhood in coming years.

“Land Use Policies” also talks about commercial districts, commenting that commercial developments must be located and designed to balance market opportunities with access and location. The planning focuses on the Downtown and Central Core District as a regional commercial activity for the community and region. A variety of other community and neighborhood scale commercial centers will be distributed throughout the community to provide for the day-to-day needs of residents. It will benefit the elderly because they will find their daily needs within a shorter travel distance and it will help to minimize the cross-town vehicle trips. Further, commercial centers are divided into three categories; Central Core District, Community Commercial, and Neighborhood Commercial depending on the center’s scale, purpose, location, and intensity of use. The discussion below will give an idea about whether any of these categories really promotes seniors participation in commercial centers. The Manhattan Comprehensive Plan does not specify type of commercial center goods for seniors, thus should look closer at which activities, goods and services provides more benefits for aging neighborhoods.

- The Central Core District (CBD) in Manhattan (the “Downtown Core”) and “Aggieville”, (more the student downtown area) are not physically connected. They both consist of a variety of civic, cultural, retail, commercial, business and professional offices and financial institutions, as well as residential uses in a compact, vibrant setting enhanced by a large inventory of older, and in some cases historic, structures and a pedestrian-friendly scale. The comprehensive plan does not suggest how it could be connected. Without this connection, the community near the CBD will be the best living place for seniors where they can participate in different activities adjacent to where they reside and pass their leisure time visiting and getting their basic needs within the same place.
- Community Commercial Centers provide a mix of retail and commercial that serves the local community and surrounding neighborhoods. It will have a variety of facilities including “big box” stores with general merchandise, grocery, apparel, appliances, hardware, lumber, and other household goods and some complementary uses, such as restaurants, specialty stores (such as books, furniture, computers, audio, office supplies, or clothing stores), professional offices and health services within the centers. This kind of commercial centers also minimizes cross-town vehicular trips. Still this pattern of development is generally not encouraged for the elderly because seniors cannot walk within a “big box” to find their specific needs; rather they prefer to go to the small special purpose store and buy their needs without searching or becoming tired.
- Neighborhood Commercial Centers also work for aging neighborhood small stores if they use supermarkets, restaurants, movie rentals, drycleaners, drugstores, filling stations,

smaller specialty shops, retail and health services and business and professional offices within the area. Smaller, limited use centers may be fully integrated into the surrounding neighborhood and be accessed primarily by pedestrians or bicycles. Here too, connectivity needs to be well defined to make the commercial center usable for senior citizens wanting to age in place. Connectivity is briefly mentioned but not clearly explained in this chapter. It mentions that the main entrances and driveways of the community should be integrated with the surrounding street network to provide clear connections between uses for vehicles, pedestrians, and bicycles. Clear, direct pedestrian connections need to be provided between uses within the center and to the surrounding neighborhoods for the commercial center to serve aging neighborhoods. However, these all are general comments and in no way is specific in explaining how the connectivity, accessibility and safety are achieved when people want to move within and outside the neighborhood in search of various needs. To the people who are aging, this will be the major concern if they want to stay in their current residence. It is possible to retrofit their home for disability or other health concerns they have that comes with aging, they can spend money in their home and make it work according to the needs. However, they cannot, by any means, make the community work for them on their own. It is the comprehensive plan that guides the planning of a neighborhood and retrofitting the plan may not be a reasonable option. Thus, there is a need for planners and other concerned citizens who are involved in the planning process to prepare a comprehensive plan that benefits all. Planning with the aging population in mind will, in fact, benefit all age groups because such will facilitate safety, accessibility and mobility. It will benefit small children providing them with safer place to play will benefit young or adult group

providing them with walkable or bikeable contiguous sidewalks and trails along with open space where they can relax and exercise after their work schedule. And, will certainly prove beneficial to seniors where they can get their every-day needs within the shortest possible distance along with their family members.

While reviewing each chapter of the Manhattan Comprehensive Plan above it was mentioned that the comprehensive plan certainly has various elements that work for the elderly. The important part that was missing in each chapter was concerns regarding connectivity from one place to another. Such plays a significant role and needs to be laid out clearly in order for the community to be livable and workable for the aging citizens.

The eighth chapter talks about “Mobility and Transportation Options”, this is an important piece in any comprehensive plan and needs to be addressed very clearly as it targets the aging population. The background and intent of the chapter explains that the city and county will address current and future transportation needs along with safe and efficient mobility patterns within a neighborhood. The transportation and mobility patterns are explained in this chapter as policies under series of goals and guiding principles that represent the community’s vision for a future transportation system. The first goal is to “Ensure that new development patterns facilitate safety, connectivity, and mobility for all modes of transportation in established and developing areas of the community.” The process of achieving this goal is also explained as:

“Plan for multimodal transportation system of streets, sidewalks, bikeways and future public transit to meet the current and future mobility needs of the community. Promote street patterns that provide maximum safety and mobility for all modes of transportation, while preserving neighborhood integrity. Promote greater connectivity between different

neighborhoods and commercial areas by providing appropriate access for automobiles, bicycles and pedestrians. Promote urban patterns and densities that will support transit. Provide improved access to the downtown area for all modes of transportation, including the provision of additional public parking, to enhance opportunities for downtown redevelopment.”

However, these are general comments and do not explain the specific means by which those goals are achieved. Review of other goals and guiding principles within the transportation chapter of comprehensive plan only gives a general outline of transportation and mobility options. Manhattan also adopts other guiding documents such as “Downtown Tomorrow” Plan, “Transit Implementation Plan”, “Manhattan Area Transportation strategy” along with the comprehensive plan that focuses on current needs of the community and adopts a better guiding policy for transportation and mobility options.

“Downtown Tomorrow Plan” (City of Manhattan & Riley County, 2000) is a redevelopment plan for downtown Manhattan, Kansas and is a part of the land use element of the Comprehensive Plan. It deals more about Downtown redevelopment that goes along with the land use chapter but there are definitely some sections within it which deals with improvement of pedestrian and traffic movement within the Manhattan area. For example, the plan explains that the Manhattan Town Center within downtown Manhattan has significant pedestrian traffic that needs to be encouraged to walk out the west entrance and explore the public plaza and Poyntz Avenue shops. The design features that emphasize pedestrian comfort, access and movement, will help to achieve those objectives. The plan also suggests design features like covered walkways, outdoor café seating with parasols, street cart vendors and benches on the public plaza for this purpose are needed. The planning purpose is to create a pedestrian-friendly environment

for all ages throughout the downtown area and for that it suggests the addition of trees and landscaping areas where people are encouraged to relax, linger and use more downtown activities and services. These are the guidelines which make the neighborhood livable for all age groups, even it is recommended that seating areas with chairs in open areas or within certain intervals along sidewalks promotes the mobility of the elderly because they can not walk long distance or stand in a park for long period of time.

The “Downtown Tomorrow Plan” (City of Manhattan & Riley County, 2000) also has a small section explaining “Traffic Movement” within downtown Manhattan. Even though it is for the downtown area, those things will be essential everywhere where the streets and walkways are located. It explains that as traffic volumes have limited access at the eastern termination of Poyntz Avenue at 3rd Street, a traffic signal at this intersection is not justified. The problem is that pedestrian and automobile traffic presently must wait unnecessarily at this traffic signal. Therefore, the plan suggests stop signs, with clearly marked pedestrian crossings or textured paving could improve both pedestrian and vehicular traffic movement at this intersection. These are the issues related with traffic movement in each comprehensive plan; safety and easy mobility of pedestrian and vehicular movement should always be explained in most clear terms under the transportation section. General comments are not recommended and specific guidelines needs to be added in the comprehensive plan. For instance, signage that is visible to every age group and textured paving which is comfortable and distinguishable to seniors are essential features in every neighborhood. These may seem petty but these little features add comfort and safety to the mobility of all age groups.

The “Downtown Tomorrow Plan” (City of Manhattan & Riley County, 2000) also has a small section on “Pedestrian and Bicycle Access”. Its review suggests encouraging people to walk between activities and services. The study of Manhattan Area anticipates development and redevelopment within the surrounding area of downtown; it encourages people to walk between downtown activities and services. Bicycle access to the downtown provides an alternative to automobiles and supports the goal of establishing a multi-modal transportation system for Manhattan. To make this work, the City also adopted a Bicycle Master Plan to develop north-south bicycle routes.

The idea of connectivity in terms of bicycle and pedestrian routes will best suit the needs of seniors which will provide them with options to walk or ride in a wheelchair from their community to the downtown where they can find most of their daily needs. These guidelines are also suitable to connect old neighborhoods with new neighborhoods as discussed in earlier part of the report where old neighborhoods can be connected with new mixed use development where the seniors can get the services they want with the minimum commuting distance.

The discussion above mentions how the Manhattan Comprehensive Plan still can work for all age groups if certain elements are added to the existing Comprehensive plan. The biggest portion missing is the addressing of “connectivity”. Still, it is mentioned in bits and pieces in other community development documents of Manhattan, such as the Downtown Tomorrow Plan, the Transit Implementation Plan, and Manhattan Area Transportation strategy. These were prepared after the comprehensive plan was adopted. The reason behind preparation of these documents or adoption of new policies and guidelines beside the comprehensive plan is that the

detailed study of current and future needs of the community showed the comprehensive plan at present lacking in addressing community needs fully which necessitated changes to the comprehensive plan. However, at present, unless the changes are made to the comprehensive plan, these community development programs are implemented to meet the current needs. The comprehensive plan should deal with all the concerns anticipated in the planning process, such as construction of sidewalks focusing how the person riding in a wheel chair can use it in a safe and efficient manner, installing signage in roads to help people with low hearing and visibility. The message here is that each comprehensive plan should give priority to all age groups without any bias, and connectivity of one service to another with proper mobility both in terms of pedestrian and vehicular accessibility should be given top priority.

The ninth chapter talks about “Housing and Neighborhoods”, the intent of this chapter is to maintain the quality of existing neighborhoods throughout the community and promote new neighborhoods that contain a variety of housing types and densities, with amenities, services and retail to ensure opportunities for a variety of household income levels. To achieve this, it lists different goals and guiding principles. The first goal is to foster the stabilization of Manhattan’s established and older core neighborhoods and it is explained that such could be achieved by maintaining, conserving, rehabilitating and/or redeveloping the housing and neighborhoods in the older areas of Manhattan, including the downtown. However, specific guidelines about how older neighborhoods could be conserved or rehabilitated are not explained in detail. The second goal is that new housing should represent a variety of housing types and costs and guiding principles for that is to provide opportunities for a greater mix of housing types which should meet the demands of various income levels. In addition, other goals are general without specific

guidelines about how the neighborhood can increase the quality of life with a variety of housing types not only for various income levels but also for various age groups. However, some policies are explained well in the section that can be taken as prototype elements for any comprehensive plan such as;

- Construction of affordable housing can be achieved if city and county work with the private sector and non-profit agencies. At the same time, the city should encourage innovative design in housing by promoting such programs as design competitions, and providing financial incentives, or other mechanisms to reduce development costs.
- Stabilization of older neighborhoods can be achieved if the city undertakes programs targeted towards stabilization of neighborhoods in the core area with the adoption of development standards for infill and redevelopment projects, remodeling, and additions to existing structures that resemble compatibility with existing neighborhood scale and character.
- Neighborhood Design can be coordinated if the city and county ensures the compatibility and connectivity of adjoining neighborhoods with new developments, during the master planning process where it should focus on identifying future roadway connections, pedestrian, park and open space linkages, and transitions between land uses or developments of varying intensities.

However, the ninth chapter does not explain policies regarding issues related to aging within the neighborhood. It does mention that the housing consideration should focus on various income levels but does not talk about housing policies regarding different age groups. That

should be major component to be addressed in every comprehensive plan because any housing type in the neighborhood whether it is built for low or high-income level should focus on all age groups. The individual house may differ according to income level but community facilities within the neighborhood should provide equal opportunities to all living within the same neighborhood. It should serve all age groups, then only will the neighborhood be fit for those who want to age in place.

The ninth chapter of the comprehensive plan is not sufficient in itself in explaining housing and neighborhood policies. That is why Manhattan adopted the plan “Housing Manhattan: Planning for the Future” on August 1, 2000. This document evaluated existing housing conditions in the community and housing needs during the next five years, by income level, housing type, tenure (owner occupied vs. rental housing), and special population needs. This document mentions the special population needs which are not made clear anywhere in the comprehensive plan and outlines that the needs of special population must be improved and expanded as the City continues to grow. The strategy explained is: housing should be provided to persons with disabilities, including frail elderly in terms of independent living that provide access to support services. This is too general and does not provide for any specific guidelines. Besides, independent living is not the only option for the elderly, for example;

- If the neighborhood is planned well and the housing within it has easy accessibility to the services required in daily life, people living in each housing unit can age in place. Therefore, planning of housing and neighborhoods should always target all age groups. Gentrification and downsizing may occur in many cases, yet such is dependent on

individual needs and preferences. If the needs can be met within the same neighborhood, the probability of remaining in the same neighborhood as one ages is considerably greater.

The eleventh chapter talks about “Community Design” which is an important portion of the comprehensive plan. The City of Manhattan will promote a high standard of design for all new development, renovation, and rehabilitation to reinforce and maintain the established visual character of the community. To maintain the visual character, a series of goals and guiding principles are discussed in this chapter that represents the communities’ values and its vision for the design of various elements within it. The first goal calls for appearance, scale, and location of urban development that needs guidelines in a proper manner to enhance community character and protect the scenic natural landscape. Some of the guidelines to promote the community character are mentioned in the chapter and can be taken as a prototype element for each comprehensive plan. Those guidelines mentioned are promotion of pedestrian-friendly neighborhoods with welcoming entrance, maintaining the character and integrity of the scenic natural landscape, and provision of adequate open space and recreational parks. The guidelines also talk about the ways the development quality of the neighborhood can be improved and points out that the city and Riley county should give high consideration in establishing development design standards that should include, but not be limited to materials, architectural details, site layout, scale and mass, height, landscaping and screening, parking location and layout, and other factors. The guidelines also mention that the design standards should help to maintain the architectural and environmental balance within the neighborhood as well as encourage innovative design with construction of pedestrian and bicycle-friendly neighborhoods.

The main suggestion for future development to make the neighborhood livable for all age groups is to Promote Accessible, Pedestrian-Friendly Community Design. To this end future residential and commercial development should be planned and designed to ensure that sites and land uses are linked by all modes of travel such as autos, pedestrians, and bicycles. The message here is that the community should always plan for all age groups, and promotion of pedestrian-friendly environment should be given top priority in terms of safe, comfortable, and convenient walking environments with well-connected systems of sidewalks, walkways and street crossings. But those things needs to be discussed in detail so that it will provide guidance to those who are actually involved in the planning and construction phase. Comments are too general, will not be supportive enough to get the desired results.

Summary

The overall review of the Manhattan Urban Area Comprehensive Plan is perhaps a classic example of a typical comprehensive plan in the United States where concern toward the elderly is totally missing; it does not even have a paragraph in the entire document which discusses elderly accommodation in the comprehensive plan. The review of each chapter of the Manhattan Urban Area Comprehensive Plan about different issues explained that those that are listed in present comprehensive plan also work for the seniors if some changes or modifications are made. Those sectors which need changes or modifications to some extent are discussed and pointed out. However, elderly accommodations are missing in most cases, and suggestions for improvements are briefly discussed. The next chapter will discuss those issues in more depth and detail to list out the elderly components in each section and to provide some guidelines that will act as prototype components for inclusion in every comprehensive planning effort.

CHAPTER 5 - POLICY CONSIDERATIONS FOR AN AGING COMPONENT IN A COMPREHENSIVE PLAN

The focus of the chapter and report itself is to develop guidelines and list them as prototype elements that should be considered essential in each comprehensive plan. If included, those elements will make the communities livable for all age groups. AARP (American Association of Retired Persons) has defined a livable community to be “one that has affordable and appropriate housing, supportive community features and services, and adequate mobility options, which together facilitate personal independence and the engagement of residents in civic and social life” (A. Kochera et al., 2007). It is also indicated that between 2005 and 2020, the U.S. Census Bureau estimates that the population of persons aged 50 to 64 will increase by 21 percent and the population 65 and older by 33 percent. The preview of most of the comprehensive plans of the United States have a common feature where the 50+ community, most of the time, are ignored when plans are prepared. However, the design, the availability of amenities, and ease of mobility have a tremendous impact on the aging population if they want to “age in place” (A. Kochera et al., 2007).

“Aging in Place is a comprehensive community driven strategy to give Americans the services, opportunities and infrastructure so that they can grow with dignity in their own homes while remaining active and engaged members of their communities.”
(Koff, 2008)

A national survey conducted by AARP found that 89 percent of persons aged 50 and older want to remain in their communities (A. Kochera et al., 2007). The impact of community design plays a vital role of fulfilling the current needs as people over 50+ in age want to reside in the same community where they had been living for several years but the current plans ignore

those populations and need to be addressed soon. The journal article “The Need For Planning In an Aging Society” published by AARP has a section heading called **“Thoughts For Planners”**, and the summary of it documented below was published as a Journal Article in Planetizen, the Planning and Development Network magazine. It provides an important message for planners and planning advocates suggesting that thought should be given to developing new policies in the comprehensive planning process which would accommodate the aging population.

“Thoughts for Planners”

The article worth in the current planning processes of the United States in making communities livable for all age groups. The article goes on saying, *“State and local governments can have an enormous impact on a community. As professionals responsible for looking out for the public interest, planners must strive to evaluate and plan for the needs of older adults. As such, AARP (American Association of Retired Persons) offers the following initial thoughts for planners.*

- 1. Understand your community’s particular demographic situation. While every community in America will be affected by the aging of the U.S. population, identify and predict the residents’ future needs and the necessary infrastructure, programs, and services to serve those needs.*
- 2. Ensure that comprehensive plans acknowledge changing demographics in your community and lay out a vision and policy framework that addresses the needs of a changing population. Housing and transportation policies should explicitly address the needs of an aging population. Does your plan support transit-oriented or other forms of mixed-use*

development? Is your transportation element overly-focused on meeting the needs of commuters, or does it address the needs of all members of your community? Does your plan include a complete streets policy to encourage road design and operation that enables safe access for all users (pedestrians, bicyclists, motorists, and transit riders), regardless of age and ability?

- 3. Does your zoning ordinances and land subdivision regulations facilitate or discourage transit-oriented or other forms of mixed-use development?*
- 4. Does your zoning ordinances and land subdivision regulations provide direction to implement your complete streets, mixed-use, and accessible housing policies?*
- 5. Both comprehensive and transit planners should be involved in the development of a community's coordinated plan.*
- 6. Evaluate your Capital Improvement Program to ascertain whether sufficient resources are directed to meet the needs of older residents. In older cities, towns, and suburbs, do you have money directed to repair and retrofit your network of sidewalks and bus stops so that older adults can safely walk or take public transportation to their destinations?*
- 7. Involve aging advocates in the community planning process. They have a perspective that may enrich overall plan quality.*
- 8. Lastly, be sure to inform and advise local elected officials and policymakers on the significant demographic shifts that will impact your community or region. As planners know, making decision-makers aware of future community needs is a necessary condition for the appropriation of funding to build infrastructure and deliver programs to make neighborhoods more livable (A. Kochera et al., 2007)."*

The guidelines mentioned above are important messages to ponder for planners and planning advocates while changing the policies in the comprehensive planning process according to current needs, as well as important information in the formulation of prototype elements of the comprehensive plan of the United States for all age groups.

The review of the Manhattan Urban Area Comprehensive Plan in chapter 4 indicated the strengths and weaknesses of the components included in each section of the comprehensive plan. This chapter will take those considerations and try to solve the weaknesses and promote strengths for planning livable communities and then list one complete set of guidelines that could act as prototype elements for the comprehensive plan. Moreover, those prototype elements in each section of Manhattan's Comprehensive Plan could conceivably fit any other comprehensive plan to accommodate all age groups in the planning process. The intent is to encourage concerned authorities to add the prototype elements and modify the codes and policies of current planning processes that will help make communities livable for all age groups, and benefit people wanting to age in place.

POLICY CONSIDERATIONS IN REVISING THE MANHATTAN URBAN AREA COMPREHENSIVE PLAN TO INCLUDE A SENIOR CITIZENS COMPONENT

A review of Manhattan Urban Area Comprehensive Plan discussed in the preceding chapter included some section/chapters of the comprehensive plan that requires policy changes for elderly accommodation. Therefore, this chapter will pick up the same section of Manhattan Comprehensive Plan and review the comments and suggestions pointed out. Then later, this

chapter will list the elements which are already there supporting all age groups, try to make modifications to the existing policies if required, and lastly, if policies are not helpful, complete sets of new policies will be added that will help to make the comprehensive plan suitable for all age groups. New policies will be supported by sources that exist in society helping to make the communities livable for all age groups and adopting elderly accommodation in the planning process.

The first chapter of the Manhattan Urban Area Comprehensive Plan talks about the “Planning Process” but the chapter does not have a definite section that addresses the concern of the elderly in the planning process. This first chapter also mentioned in the overview that it will incorporate the current issues and intends to provide policy guidance for approximately the next 20 years, but elderly accommodation policies are not mentioned in the entire comprehensive plan.

“Even if a community has a current vision statement or comprehensive plan that expresses a goal of walkable neighborhoods, housing choices, and vibrant downtowns, the existing codes may not have been updated to reflect this. In many cases, outdated codes may even make it impossible to achieve this kind of vision. Local governments need to look critically at the zoning and related regulations that classify land use and that regulate building setbacks, density, parking, and other urban design functions.”

(National Association of Area Agencies on Aging, 2007, p.17)

Manhattan’s Comprehensive Plan also mentions the elderly concerns in its vision mission statement but it restricts to a few statements only, the existing codes and policies may not be supportive enough and might need some changes for elderly accommodation in planning

process. It is important to mention here about the current issue of the United States, whether it is Manhattan or any city or county of the United States, the need of elderly accommodation in the comprehensive planning approach is the most essential factor and requires much more attention for the near future. The report documented from the second workshop conducted in Arizona initiates aging in place and states,

“America is aging. Today roughly 37 Americans age 65 and older represent slightly more than 12 percent of the country’s total population. By the year 2030 the number of Americans in this age group will nearly double, accounting for one-fifth of the population. Due to the overwhelming desire of older Americans to age in place in their own homes, communities will face unprecedented challenges to providing the services and infrastructure that this population will demand.”

(Koff, 2008)

The United States demographic trend shows that in the near future, the seniors will be dominant in overall population but review of most of the comprehensive plan including the Manhattan Urban Area Comprehensive Plan lacks elderly accommodation. Therefore, the Manhattan Urban Area Comprehensive plan needs to add elderly components to make the community livable for all age groups. The other concern of the planning approach might entail what changes might evolve in future year in the senior citizen needs and lifestyle. Will they follow the same trend as before or will they act in a different way? The report “Developing a Livable Arizona for All Ages” documented from the second workshop conducted in Arizona quotes, “The fact that so many older adults are eager to try a new career and to keep working past traditional retirement age reveals a whole different set of challenges. Older adults want to find meaningful opportunities that take advantage of their talents, experience and passions, but they are struggling to find them” (Koff, 2008). The message here is that the needs of seniors in

coming years are different than they were in past. The above statement can be supported by portion of the report “Developing a Livable Tampa Bay Region for All Ages”. The report was actually prepared after the workshop in the Tampa Bay region about need for a comprehensive approach to aging. The discussion in the workshop highlighted that “activity” will be different of baby boomers than seniors before and planning approach should consider those issues. One of the Panelists Jack Bowersox emphasized that, as the boomers become older adults they do not want to relax; they will act as active aging adults who are more technologically savvy and engaged than their predecessors (Developing a livable Tampa Bay region for all ages, 2007). Therefore, the message is that the driving force for a comprehensive approach requires planning in both new and proven ways. Even if seniors are more enthusiastic or actively working in their retired life, their health conditions deteriorate in terms of hearing, vision and physical disabilities. Therefore, mobility options and proper infrastructure development within the neighborhood plays an important role in keeping the elderly connected with various amenities making their lifestyle still somewhat active. The report written after the workshop conducted in Arizona on the topic “Developing a Livable Arizona for All Ages” quotes’

“Research shows that older adults want engaging opportunities that will connect them to their communities. A landmark study in 2005 by the MetLife Foundation and Civic Ventures reported that more than half of older adults want jobs that help improve their communities or provide them with a sense of purpose.”

(Koff, 2008)

Some of the current issues that need to be considered in the comprehensive planning process are;

- *Need to add components that support elderly accommodation in the planning process making the communities supportive for aging in place.*
- *Needs to focus on current trends of the aging population where the elderly are more active and want to participate in community activities. Comprehensive approaches require planning in both new and proven ways making the communities livable for all age groups.*
- *Need to focus on improving mobility patterns of the elderly within the neighborhood by improving proper infrastructure development and effective transportation planning which is supportive for aging in place.*
- *Need to engage older adult in the planning process, it is seen that new community design that supports aging in place lacks broad public support (National Association of Area Agencies on Aging, 2007).*

The fourth chapter “Land Use and Growth Management” of the Manhattan Urban Area Comprehensive Plan has a set of goals to promote the community’s values and its vision for an efficient use of land. Two goals are explicitly mentioned; one promotes compact development/high density development and second promotes strengthening and revitalizing the downtown Manhattan. Both of these goals are important tools to make the communities livable for all age groups. Compact development will allow various facilities within an approachable distance, and improvement of downtown will benefit the senior citizens in connecting with various facilities such as the city’s primary businesses, offices, governmental and cultural

centers. However, the goals are not promoted by policies as such neighborhoods close to downtown Manhattan has poor sidewalk conditions that disabled seniors reaching downtown even when it is in a walking distance. At the same time, neighborhoods that are a short distance from downtown cannot reach downtown due to lack of proper transportation. As a whole, land use policies with adequate transportation and mobility options seems lacking in Manhattan's comprehensive plan and those are important factors for promoting livable communities.

“A livable community is one that has affordable and appropriate housing, supportive community features and services, and adequate mobility options, which together facilitate personal independence and the engagement of residents in civic and social life.”

(Kihl, Herberger Center for Design Excellence, & Public Policy Institute (AARP (Organization)), 2005, p.2)

The Manhattan Urban Area Comprehensive Plan incorporates the policies that intend to create a diverse neighborhood with a variety of housing types and an array of services, such as proximity to health care facilities, grocery stores, schools and parks. The planning policies focus on walkable communities but the infrastructure development within the neighborhood such as walkways and road signs are not in good condition to support movement of elderly and disabled people. The Manhattan Comprehensive Planning also promotes cluster development as an option to protect environmentally sensitive areas and provide common community open space. Common open space with natural environment within the community helps the elderly to participate in activities that they have been doing before. However, for the new development, the Comprehensive Plan encourages walkable, mixed-use neighborhoods with a focal point that includes neighborhood-scale retail and services, public and institutional buildings such as schools, daycare facilities, community centers, places of worship, parks and open space. The

Manhattan Comprehensive Plan also suggests linking new mixed-use developments with existing developments. This will be a good idea if there is no possibility of providing all the services to the existing neighborhoods but still can access those services from neighborhoods adjacent to them. “Land Use Policies” of Manhattan also talks about commercial districts, commenting that commercial developments must be located and designed to balance market opportunities with access and location. The planning focuses on the Downtown and Central Core District as a regional commercial activity for the community and region. A variety of other community and neighborhood scale commercial centers should be distributed throughout the community to provide for day-to-day needs of residents to find their daily needs within a shorter travel distance.

“Rigidly separated land uses can place businesses and services far from residential areas, making it difficult for many older adults to participate in social or recreational activities, unless they have someone else to drive them back and forth.”

(National Association of Area Agencies on Aging, 2007, p.3)

Land Use Policies: Prototype elements for a Comprehensive Plan supporting all Ages.

- *Promote compact development/high density development.* It will allow various facilities such as health care centers, grocery stores, banks, recreational areas, offices within an approachable distance and will minimize a cross-town vehicle trip that seem difficult for aging people and expensive for all age groups.
- *Strengthen and revitalize the downtown area, connect downtown with the rest of the neighborhoods that provides the city’s primary business, governmental offices, and cultural center, library, post office, bank, grocery store and shopping area within one boundary.* For this purpose, neighborhoods near to the downtown must be linked with

appropriate, comfortable and safe walkways and bikeways and neighborhoods farther from downtown with appropriate modes of transportation.

- *Promote cluster development within compact development where open spaces combine as a common community open space that will help to gather all in one place.* Open space will help to reunite people in one common area, pass the leisure time of seniors in active environment with kids and younger people. It will also help to reduce loneliness that seems common in retired life in the United States. At the same time, it will minimize depression and other health deteriorating symptoms of seniors caused by loneliness.
- *Encourage and promote mixed-use neighborhoods for new development.* Mixed-use development will support walkable neighborhoods with a focal point that includes neighborhood-scale retail and services, public and institutional buildings such as schools, daycare facilities, and community centers, places of worship, parks and open space.
- *Link new mixed- use development with the existing community that lacks all the day-to-day services in an approachable distance.* Integrating them together will help to make the older neighborhoods livable. People can age in old neighborhoods that lack services they need in day-to-day life as they can access those from nearby neighborhoods if planning promotes a safe and easy mobility option.
- *Commercial developments must be located and designed to balance market opportunities with proper access and location.* At the same time, variety of other community and neighborhood scale commercial centers should be distributed throughout the community to provide for the day-to-day needs of residents within a shorter travel distance.
- *Overall, connect residential, open space and recreation areas by an appropriately planned network of streets, walkways, bicycle paths, and utility corridors.* Make it

possible for people to safely walk or bicycle or use a wheelchair to work and shopping and reduce reliance on automobiles and reduce commuting time and distance. Make area transit service more viable and provide greater convenience for elderly and disabled people.

However, even if these prototype elements are added in the comprehensive plan, the comprehensive plan will not work without adequate mobility and transportation options. Transportation and mobility options help to connect people with different land uses such as home to grocery store, bank or other recreational space. In another way, transportation and other mobility options helps to connect different land uses such as residential with commercial or other districts. Connectivity includes both pedestrian movements and vehicular movements. The access and circulation should tie development into the overall neighborhood and is discussed in detail in the “Mobility and Transportation Options” chapter.

The eighth chapter of the Manhattan Urban Area Comprehensive Plan talks about “Mobility and Transportation Options”. The Background and intent of the chapter explains that the city and county will address current and future transportation needs along with safe and efficient mobility pattern within a neighborhood. Nevertheless, the policies explained to promote mobility and transportation option are too general such as “the comprehensive plan should plan for multimodal transportation systems of streets, sidewalks, bikeways and future public transit to meet the current and future mobility needs of the community. Promote street patterns that provide maximum safety and mobility for all modes of transportation, while preserving neighborhood integrity. Promote greater connectivity between different neighborhoods and

commercial areas by providing appropriate access for automobiles, bicycles and pedestrians” (City of Manhattan & Riley County, 2003). In addition, neighborhood development should provide sidewalks on both sides of the street for safety reasons and to support walking.

However, these are general comments and do not explain the specific means of mobility and transportation needs of the citizens. Manhattan also does not have a better mobility pattern within the neighborhoods near to downtown with poor sidewalk conditions, and does not offer public transportation options either. Therefore, this section of the report will use a huge amount of literature resources to create prototype elements that promotes mobility and transportation options making the communities livable for all age groups.

Connectivity does not always mean providing roads, pathways or sidewalks but different issues related to it play a major role if the neighborhood is meant for all age groups. Components such as signage and crossings in road, slopes/ grades and use of material in pathways and walkways, even placing a bench adjacent to sidewalks or covered waiting place in bus stops can play a major role if it is meant to accommodate the general public. As mentioned earlier, walkable communities with sidewalks, walking trails and bicycle track provides livable neighborhoods for seniors and all age groups. Walkable communities also support aging in place where they can fulfill their day-to-day needs on foot or by wheelchair if necessary. Walkable communities also help to reduce the loneliness of the elderly by providing a sense of social attachment. At the same time, walkable communities help to improve public health of all age groups and help to reduce the use of automobiles producing air and noise pollution.

“The United States is gripped by a worsening epidemic of obesity... Many studies suggest that lack of physical exercise is one important reason for the alarming trend toward increased obesity. Several articles and editorials in the leading medical and public health journals have explicitly advocated more walking and cycling for daily travel as the most affordable, feasible, and dependable way for people to get the additional exercise they need.”

(Pucher, Dijkstra, 2003)

Mobility Pattern: Prototype Elements for comprehensive plan

Sidewalks and Walkways:

- *Providing good design of sidewalk and walking path.* Sidewalks should be smooth, not slippery, and barrier-free. Snow and ice, leaves, bumps and holes must be cleared.
- *Avoiding changes in grade and irregular textures that may create safety hazards from falling and slipping.* Major on-site pedestrian access routes should not involve a slope greater than 5 percent. A gradient greater than 5 percent should be considered a ramp (Widiyastuti & Ohio LINK Electronic Theses and Dissertations Center, 2004).

Powered wheelchairs in the market are seen in the market today which helps in making seniors mobile. Consideration such as easy mobility of those wheelchairs will be an important issue in coming years. According to the Americans with Disabilities Act (ADA) Accessibility Guidelines, a standard ramp in the built environment should have a grade no steeper than 1:12

(sometimes referred to as an 8 percent grade or slope). Thus, while designing sidewalks this should be taken into consideration in making communities livable for all age groups.

- *Separate devices should be installed wherever possible (usually at intersection) to keep cars and pedestrians away from each other (Parker et al., 1991).*
- Walkways should be built over major thoroughfares to help pedestrians to cross the streets safely.
- Plant grass and trees along medians in multi-lane streets to create midway stopping point, and shade along pathways.
- *Curb heights should be lowered where appropriate and curb cuts should be marked properly at corners, which should be free of obstacles and parked cars (Parker et al., 1991).* ADA has requirements for the design of accessible routes that includes the design of sidewalks and walkways that must be met when they are being designed and built, for example, grades and curb cuts (Burchett, 1996).
- *Make walkways wide enough to accommodate two people walking side by side or a walker and friend in wheelchair.*
- *Create pedestrian pathways at street level to connect parks, public transportation, shops, and public buildings.*

Bicycle Travel:

- *Provide separate lanes in streets for bikers to minimize risk from automobiles.*
- *Construct separate bicycle paths wherever possible so that pedestrians will not be at risk.*
- *Enforce rules that support bicycle and pedestrian safety.*

(Parker et al., 1991).

Cross walks and signage:

- *Traffic lights should be set to allow sufficient time for pedestrians (slow moving person) to cross the street.*
- *Easy-to-read signs make finding the way simpler. Clearly mark streets, buildings and directions with highly visible letters and symbols. Use contrasting colors, bright colors, and tactile symbols to make signs more readable.*
- *Bells or sounds permit visually impaired persons to know when it is safe to cross streets. Be sure the volume does not drown out other sounds. Public spaces should be pedestrian oriented and need to provide visible signs and pedestrian crossings.*

(Parker et al., 1991)

Lighting:

- *Adequate lighting deters nighttime crime and makes finding the way easier. Improve visibility in both residential and commercial areas to make it easier to walk to nearby destinations and to discourage petty crimes that often thrives on darkened walkways.*
- *Improve the quality of both indoor and outdoor lighting so that it does not produce glare and blind spots.*
- *Maintain a tree trimming program which allows sidewalk lighting without any blockage.*

(Parker et al., 1991)

Seating:

- *Providing an opportunity to rest encourages walking motivation, especially for elderly with limited mobility.* The elderly, children and the physically challenged have different levels of stamina and endurance. Places to rest along sidewalks are enjoyable and helpful for all pedestrians, and especially for the elderly and those with physical handicaps, who may find walking long distances exhausting.
- *Seating should be provided at 300-foot interval along sidewalks to allow individuals places to rest* (Burchett, 1996).
- *Provide lighting near seating for safety and increased vision of surroundings.*
- *Seating areas should be paved to provide firm footing.*

Walkable communities are livable for all age groups where day-to-day needs are readily available but it does not always happen. People may have to commute outside the community in search of some basic needs. Americans usually are independent; driving seems important to make them mobile but deteriorating health with aging forces seniors to depend on public transportation to find their daily needs. Public transportation for the elderly and the physically challenged is of major importance if they are to remain mobile and active in the community.

“To live independently, older Americans must be able to maintain a mobile lifestyle. In most communities today, that means owning and driving a car. But the process of aging often involves a deterioration of physical and functional skills that can make driving more difficult. The physical environment often compounds the difficulty through signage and road design that can confuse and endanger drivers of all ages and abilities.”

(National Association of Area Agencies on Aging, 2007)

Roads and communities in American cities have been designed primarily to serve automobile travel according to land use before World War II, which was a house in a big lot with shopping and other use far from the residential area. However, this is unfavorable to older adults because of their physical disabilities (National Association of Area Agencies on Aging, 2007). One of eight persons age 50 and older, and one of five persons 65 and older, do not drive (A. Kochera et al., 2005). Therefore, to enable older adults to remain mobile and engaged in their communities, transportation planning and design requires new policies.

Transportation Option: Prototype Elements of Comprehensive Plan

For senior citizens who can drive:

- *Small modifications in roadway design and signage can greatly improve safety.*
- *Brighter stop lights and pavement markings, protected left-turn signals.*
- *Larger lettering on street-name and directional signs.*
- *Converting two-way-stop intersections to four-way-stop intersections.*
- *Local governments can initiate research to identify best practices and local priorities to reduce crashes involving older motorists and pedestrians.*

(National Association of Area Agencies on Aging, 2007)

- *Seniors should also regularly self-assess their own capacity and attend a driver refresher course. There are some other options to assess the driving capacity of seniors and government should initiate and make those professionals readily available;*

“Therapeutic interventions, including cognitive training, may be available from certified driving rehabilitation specialists (CDRS). These professionals can assist individuals who have suffered an acute episode that has resulted in loss of driving capacity. With

recognition of the need for mechanisms to extend the safe driving years, there is increasing demand for CDRS services, although currently there are only about 300 of these professionals throughout the United States.”

(A. Kochera et al., 2005)

Transportation Option: Prototype Elements of the Comprehensive Plan

For senior citizens who cannot drive:

- *Public transportation is an option for everyone. Make transit services more flexible and customer responsive.*
- *Determine where and when transportation is needed, and by whom. Provide a Para-transit service (e.g., van, taxi) independent of or supplemental to fixed route transit system if the needs are justified.*
- *Provide neighborhood circulator services, such as smaller shuttle buses which connect seniors to city centers, and other designated destinations. .*
- *Purchasing low-floor buses, which are easier for older adults to board and reducing waiting times through fleet expansions.*
- *Improve the location of bus and stops and refit them with benches, clearly marked signs, lights, and covered or enclosed waiting areas. Upgrade signs, signals, and markings for roadways, providing better environmental cues for drivers to respond to.*
- *Make mass transit accessible to persons in wheelchairs by using lifts and other devices.*

(Parker et al., 1991)

- *Dial-a ride service also should be an option to those who cannot access fixed route buses, eligible residents at the curb in front of their homes as long as they live within three quarters of a mile of a bus route. Some communities offer a dial-a ride, door-to-*

door service for older residents and those with disabilities, usually at higher cost than most fixed-route buses (Ball, 2000).

- *Government should make available customer-friendly public transportation conveniently in all areas, as it will provide mobility options for all age groups. Eighty five percent of nondrivers age 50 and older in the United States say that they do not have a medical condition that limits transit use (A. Kochera et al., 2005)."*
- Most of the seniors have health problems or they have to perform routine checkups but lack of transportation to hospitals and doctors' offices affects access to health care. *Therefore, government should work with the local transit agency to adjust routes so that older adults have easier access to health care services. They can also create a brokerage service connecting health care consumers with the most appropriate available transportation services (National Association of Area Agencies on Aging, 2007).*
- *Lastly, "volunteer transportation" is an important mobility option for individuals who need personal assistance. Although well-run and customer-friendly public transportation, including ADA paratransit, could meet the needs of many older nondrivers, many other individuals may need more assistance than these public services can provide (A. Kochera et al., 2005).*

The ninth chapter of the Manhattan Urban Area Comprehensive Plan talks about "Housing and Neighborhoods", the intent of this chapter is to maintain the quality of existing neighborhoods throughout the community and promote new neighborhoods that contain a variety of housing types and densities with a variety of household income levels. It points out that the new housing should represent a variety of housing types and costs that meets the demands of

various income levels and suggests for downtown promotion and revitalization. However, guidelines to achieve those goals above are not discussed in detail. Still, some suggestions made are remarkable for policy makers to think about;

- *Construction of affordable housing can be achieved if city and county work with the private sector and non-profit agencies. At the same time, the city should encourage innovative design in housing by promoting such programs as design competitions, financial incentives, or other mechanisms to reduce development costs.*
- *Neighborhood Design can be coordinated if the city and county ensures the compatibility and connectivity of adjoining neighborhoods with new developments, during the master planning process where it should focus on identifying future roadway connections, pedestrian, park and open space linkages, and transitions between land uses or developments of varying intensities.*
- *Stabilization of older neighborhoods can be achieved if the city undertakes programs targeted towards stabilization of neighborhoods in the core area with the adoption of development standards for infill and redevelopment projects, remodeling, and additions to existing structures that resemble compatibility with existing neighborhood scale and character.*
- *Provide “senior” housing projects within the community that would allow “downsizing” by senior citizens if they wish to relocate to smaller accommodations near downtown.*

However, the housing and neighborhood chapter of the Manhattan Plan does not show any concern for the aging population. A result from the survey report prepared by AARP mentions that community attachment is highest for those who have lived in their communities the longest.

In fact, people age 50 and older strongly and overwhelmingly express interest in remaining in their homes for as long as possible, and this desire rises by age group because of emotional attachment to their home community. At the same time, the survey also mentions more than 85 percent of respondents earning less than \$20,000 a year agreed or strongly preferred to live in their current residence as long as possible. This percentage is slightly larger than that reported by respondents earning more than \$50,000 per year (76%). Yet, persons with relatively low incomes (and persons on fixed incomes) are most vulnerable to increasing home costs and may have difficulty remaining in the community to which they may have long-established ties in the face of rising housing costs (A. Kochera et al., 2005). The need for affordable housing for seniors and low-income people are higher in demand in the United States; the government should give special concern for the need of seniors and low-income people who are the most vulnerable group of the overall population.

In the United States, “housing choices are also limited because of zoning restrictions. Suburban land use regulations tend to result in homogeneous housing stock. Detached single-family homes on large lots that can be attractive to families with children may turn into a burden for older homeowners whose children are grown. Many people would like to have the option of living in more compact homes or apartments that are easier to maintain and may be within a walking distance of shops and services (National Association of Area Agencies on Aging, 2007).” Therefore, the needs and expectations for housing change with age. In addition, the aging population will be dominant in each community in coming years. The housing options in our communities should reflect these evolving needs and expectations.

Housing and Neighborhood: Prototype Elements of a Comprehensive Plan

- *The first and the foremost important element to make the comprehensive plan work according to changing demographics of today and even more tomorrow is flexible zoning codes. Existing codes need to be updated. Most of the comprehensive plan states they will look for seniors in their vision mission statement but completely left those issues in neighborhood design out of supporting codes for the planning process (National Association of Area Agencies on Aging, 2007).*
- *Local government should review local plans and zoning requirements periodically to assess their impact on the availability of affordable/diverse housing options for seniors.*
- *Government should remove zoning barriers to such housing alternatives as accessory apartments and shared housing*

Affordable Housing:

- *Affordable housing that is supportive of the elderly and other low-income groups include supportive housing arrangements, such as assisted living, that are affordable for people of low and moderate incomes.*
- *Affordable housing provides a diverse array of housing stock, including apartments, home sharing options, and compact housing that enables residents to age successfully.*
- *Government should introduce property tax relief programs for older homeowners.*

(National Association of Area Agencies on Aging, 2007)

Housing Stock:

- *Home and building design also plays a major role to age in place and needs to be given priority in new home design policies. At the same time, the information about modifications to the older housing stock should be made available.*
- *Actually, getting home design right for the first time or improved home design will provide homes for successful aging. Adding features such as main-floor bathrooms and wider doorways, clear floor spaces in kitchen and restrooms can greatly extend adults' ability to enjoy their homes for a lifetime. At the same time, small modifications, such as grab bars and improved lighting can make a big difference to people when they age.*
- *At the same time, modification of existing homes is equally important for people wanting to age in place. Home modification is expensive and seniors move from their home if they are unable to afford it because their physical disabilities might inhibit their ability to stay in the same home. However, another reason for their reluctance about home modifications may be the inability to do the work themselves, uncertainty about selecting a contractor, and uncertainty about the exact changes needed. Therefore, community services that link residents to provide information about financing options, contractors, and architectural options seem essential.*

(A. Kochera et al., 2005)

Mixed Use Development with variety of housing types:

- *The modifications to the homes will not be enough to age in place. Land use plans and zoning codes should enable and encourage housing in proximity to services and support the formation of intergenerational, mixed-income communities.*

- *To provide successful aging, the community should provide mixed range of housing from low to high income level along with safe and easy access to services (recreational and commercial), amenities, and support networks (such as friends and family) within a single development.*
- *Promote compact mixed-use development along with pedestrian friendly neighborhood.*
- *Promote well-designed, transit-oriented developments that are pedestrian friendly containing a mix of uses, have a variety of housing options, and frequently become vibrant community focal points.*

(A. Kochera et al., 2005)

Immediate accessibility:

- Beside availability of different services to fulfill daily needs within the mixed-use development such as grocery stores, banks and recreational areas and so on, there are certain emergency needs that should exist in communities to make the community fit for aging. “Aging in Place is a wish” but sometimes health conditions of some elderly suddenly deteriorate and they need an immediate assistance. *Health care clinics or immediate care centers should exist within each neighborhood with 24-hour transportation provisions for transferring patient to major health care centers in case of emergencies.*
- Some elderly live with their children and sometimes with their deteriorating health, they have to be taken care of for a day or two when their children have to go out for a few days or when their caregivers have some emergency or day off. It will create trouble for their working children, *so the community should have day care/ night care centers to meet these special needs.*

Safety provision:

Personal safety and security within the neighborhood is as essential to the well-being of older adults as it is for individuals of any age. Fear of crime is a particular concern for older Americans who feel more vulnerable to victimization. The National Elder Abuse Incidence Study mandated by Congress in 1996 estimated that 449,924 persons age 60 and older were abused, neglected, or exploited in their domestic settings (National Association of Area Agencies on Aging, 2006).

- *Ensure that pedestrian walkways and bicycle trails are not isolated from the sight and sound of other activities.*
- *Make sure that parking lots are well lit, and not surrounded by high walls or shrubbery.*
- *Communities should ensure that public safety personnel and first responders to help older adults who are frail in emergencies and natural disasters.*
- *Traffic calming policies such as road narrowing, zigzag routes, artificial dead ends within the residential area will provide rights to pedestrian and bicyclists with safer mobility options within the neighborhood.*

The eleventh chapter of the Manhattan Urban Area Comprehensive Plan talks about “Community Design”, which is an important portion of the comprehensive plan helping to make the community livable for all age groups. This is the important piece that, in fact, reveals whether the plan supports or does not support aging in place. Even if the housing stock is not attentive to aging needs, modifications could be made to make it work on an individual basis, but to make the community design work is not in any individual’s hand. The planning process should promote community design that promotes aging in place. Manhattan’s comprehensive

plan mentions that the city of Manhattan will promote a high standard of design for all new development, renovation, and rehabilitation to reinforce and maintain the established visual character of the community. Mostly, community design process either talks about the visual character or from the design or visual aspect. However, the Comprehensive Plan of Manhattan fails to mention how the community could be made livable for all age groups. The overall planning of the community actually supports aging in place. Some of the guidelines mentioned in the Manhattan Comprehensive Plan are important elements in the planning process but are not explained in detail, such as

- Promotion of pedestrian-friendly neighborhoods with welcoming entrance, maintenance of the character and integrity of the scenic natural landscape and availability of adequate open space and recreational parks.
- The quality of the neighborhood can be improved by establishing development design standards that should include, but not be limited to materials, architectural details, site layout, scale and mass, height, landscaping and screening, parking location and layout and so on.

The earlier part of this report discussed housing and transportation options and concluded that the most livable communities are those which have walkable neighborhoods where daily needs and other services exist within a walking distance. Most of the research showed that social networks and community involvement have positive health consequences. Persons who are socially engaged with others and actively involved in their communities tend to live longer and be healthier physically and mentally. Therefore, the built environment or planning of the community guides the health condition of the aging people. At the same time, pedestrian

oriented mixed-use neighborhoods enhance “social capital” as they enable residents to interact either intentionally or unintentionally. Those contacts provide the elderly a sense of connectedness to the community, which will help them dispel feelings of loneliness they have in their senior life (Leyden, 2003).

“Community engagement is important for people of all ages, but it is particularly so for those whose lives are changing as a result of children moving away from home, retirement, loss of spouse, or providing personal care for a family member. Community engagement, as this report shows, is a primary contributor to successful aging by significantly influencing the health and well-being of adults as they age.”

(A. Kochera et al., 2005, p.22)

Community Design: Elements of the Comprehensive Plan

- *Mixed-use neighborhoods with a wide range of housing options as discussed earlier provides a livable community for all age groups which will reduce distances between residences, shopping sites, recreation, health care facilities, and other community features.*
- *Walkable neighborhoods along with easier and safer mobility options and availability of day-to-day needs within an approachable distance will also help to engage seniors in community activities.*
 - *Pedestrian circulation system should support social interaction such as cluster walkways on major access routes. This arrangement could provide an opportunity to meet with other people.*
 - *Smaller and intimate space is most suitable for encouraging conversation and socializing.*

- *Creating a series of walkways that connect in the form of walking loops, which offers choices of routes by length or difficulty as well as sensory interest, variety and flexibility for the elderly.*
- *Providing an opportunity to rest encourages motivation for walking, especially for the elderly with limited mobility.*

(Widiyastuti & OhioLINK Electronic Theses and Dissertations Center, 2004)

- *Provide community gathering places such as parks and public open spaces:* Parks, squares, plazas, malls, and playgrounds where different groups of people meet and interact are termed as public space. Public spaces generally contain public amenities such as walkways, benches, water, physical and visual elements, and vegetation that supports activities. Public space can accommodate active recreation such as football, golf, jogging and other games to promote physical activities and passive recreation such as strolling, watching sceneries, reading and resting or meeting friends (Widiyastuti & Ohio LINK Electronic Theses and Dissertations Center, 2004). The active recreation will involve children and adults and passive recreation will bring together the elderly in one combined space creating a livable community. This will benefit seniors because they feel connected to the community and will help to minimize their loneliness. At the same time, seniors can walk on trails, sit in the sun, or talk with friends that will make certain engagement in daily routines, and improve their health conditions as well.

“There is considerable evidence that links community engagement to longevity, physical health, life satisfaction, and other indicators of psychological well-being of older adults.”

(A. Kochera et al., 2005)

Prototype elements that needs to be added in park and open space, to accommodate all age groups, including elderly and disabled.

- *Provide walking trails with suitable materials and grades that provide comfortable walking to seniors.*
- *Provide seating space such as benches with armrests in places such as parks, pedestrian paths, outside plazas for seniors with limited mobility where they can rest for a while and walk or sit and see the communal activities or chat with others.*
- *Provide outdoor phones nearby.*
- *Make first-aid service available within close proximity.*
- *Provide public restrooms and water fountains near to the seating space.*
- *Provide lights in sitting areas to increase safety.*
- *Provide civic centers such as libraries, museum and art centers near to the community for seniors to take part in and pass their leisure time, but most of the research predicts that the boomers coming in the near future will be different than the elderly in the past, they don't want to spend their retired life resting or relaxing. The research article published by Health and the MetLife Foundation Initiative on the topic "Reinventing Aging: Baby Boomers and Civic Engagement" found that baby boomers have the potential to become a "social resource of unprecedented proportions by actively participating in the life of their communities." The boomers want to be active in their retired life, and whole idea of "community engagement" plays a major role in the future society.*

“Community engagement comprises a wide range of activities, including social encounters with neighbors, volunteering, and participation in community planning and political activities, all of which link a person with his or her community.”

(A. Kochera et al., 2005, p.15)

The policies that enhance community engagement for seniors:

- *Provide “Volunteering Opportunity” for the seniors that help productive aging.*
- *Involve seniors in community affairs that encompass community attachment.*
- *Localities and non-government organizations should create and expand opportunities for volunteerism and community service.*
- *Localities should promote activities such as farmers’ markets, walking groups, etc. that support residents’ interaction.*
- *States and localities, including regional planning organizations, should enhance opportunities for citizen participation in planning meetings and other decision-making processes.*

(A. Kochera et al., 2005, p.92)

At last, policies recommended for Community Leaders, Planners and Policy Makers participating in the comprehensive planning process of the United States:

- ***Understand your community’s particular demographic situation.*** *Every community in America will be affected by the aging of the U.S. population, and will predict the residents’ future needs and the necessary infrastructure, programs, and services to serve those needs (National Association of Area Agencies on Aging, 2007).*

- ***Initiate changes in zoning and land use policies to facilitate more walkable communities.*** Although most Americans would like to walk more, zoning codes in suburban communities and lack of contiguous sidewalks tend to discourage walkable communities. Local governments are required to develop and update plans for land use every 5 to 10 years (A. Kochera et al., 2005, p.17).
- ***Both comprehensive planner and transit planners should be involved in the development of a community's coordinated plan*** (National Association of Area Agencies on Aging, 2006).
- ***"Zoning Ordinances" are often responsible for enabling or preventing the development of "lifecycle communities."*** Lifecycle communities are communities that are sufficiently flexible in physical infrastructure and service and social resources to accommodate the changing needs of all residents as they age. As America's population ages over the next few decades, policy makers in the communities will need to consider how guidelines in the Americans with Disabilities Act (ADA) may be applicable to the planning of entire towns (Ball, 2000
- ***Public involvement is a critical component of any strategy to solve the planning and zoning equation and promote aging in place.*** Zoning changes do not simply happen in windowless rooms, they are often very public processes that should involve neighborhood members and raise intense emotions and strong opinions (Ball, 2000, p.16).
- ***Engage older adults in the planning process.*** Older citizens are often the most experienced, influential civic leaders. They can help local governments, and planners educate their fellow citizens about the need for more flexible land uses and zoning (Developing a Livable Tampa Bay region for all ages, 2007).

- *Evaluate Capital Improvement Program to ascertain whether sufficient resources are directed to meet the needs of older residents. In older cities, towns, and suburbs, direct money to repair and retrofit your network of sidewalks and bus stops so that older adults can safely walk or take public transportation to their destinations (National Association of Area Agencies on Aging, 2006).*
- *Government should provide great varieties of civic engagement opportunities to seniors and planners and policy makers should add those policies in new planning approach. Many of tomorrow's retirees—the baby boom generation—express a desire to volunteer more upon retirement. However, outdated models of volunteering constitute a critical challenge. Most community organizations and nonprofits are not prepared to manage large numbers of volunteers and mobilize their full range of skills (National Association of Area Agencies on Aging, 2007, p.43).*
- *Lastly, local government, planners, policy makers requires “Collaboration” in the planning process. To earn better results for the community, it requires a tremendous amount of time, energy and leadership between all involved in the planning process., This kind of leadership requires a process, that usually involves the six steps;*
 - 1. Local leadership to tackle any major challenge.*
 - 2. A constant give-and-take exchange among stakeholders.*
 - 3. Identify and act on common priorities.*
 - 4. broad range of community leaders should unite.*
 - 5. Identify common goals.*
 - 6. Work together toward achieving these goals and provide creative solutions*
(National Association of Area Agencies on Aging, 2007, p.66)

CHAPTER 6 - CONCLUSION

The literature research shows that the United States is experiencing a demographic shift as the majority of the population consisting of the baby boomers of the sixties will turn over 60 in the near future. The transition of this huge baby-boom generation from the workforce to retirees will affect every sector of the nation. This report was an attempt to research the effect of that aging population (especially the needs of elderly) on the community and the changes that are foreseen in the comprehensive planning approach to make the community livable for all age groups. In addition, some policy guidelines that help to incorporate elderly needs in the comprehensive planning process have been gathered from different sources.

The first part of this report is a literature review regarding the issues related to “aging” in terms of health and its consequences in day-to-day life. At the same time, the needs of the elderly were researched to determine the elements which should be addressed in making the community livable for senior citizens. It was concluded that the aging process brings various kinds of health issues that will separate a senior lifestyle from the rest of the population. The most crucial health issue was “physical disability” which makes the living of seniors different from that of the young and able-bodied. The research also suggested that most seniors want to continue to live in the same place where they had been living most of their life. However, more often than not, they are forced to move out of the community as the community is lacking in accommodating the mobility of the disabled. At present, advancements in building technology make it possible to retrofit homes according to disability. Still, what is, in fact, being done is far from being enough in ensuring comfortable and successful aging. In analyzing the essentials of livable communities, availability of day-to-day needs within the shortest distance with proper

mobility options was identified as the most important factor to accommodate successful aging in any community.

The research then concentrated on reviewing one comprehensive plan to determine whether the needs of the senior citizens of the community were being addressed. A review of the Manhattan Urban Area Plan was determined to be wanting in explaining the needs and rights of the aged, for the majority of the population will be young and able-bodied and their needs usually take priority in formulating any community's plan and policies. However, what lessons could be learned here is that being up-to-date with new data and making necessary changes according to new issues is necessary to make any comprehensive plan work. The comprehensive plan should not act as a "static document" but should bring changes in its policies to suit the community's current needs. For that reason, it is necessary to validate and evaluate the comprehensive plan's goals, objectives and policies frequently to ensure that it reflects the desires of the community. If no changes are to be made in the comprehensive plan, it should be determined whether any alterations and amendments could benefit the overall vision for the community.

The research findings are based on a case study of the Manhattan Urban Area Comprehensive Plan. The plan was thoroughly reviewed to determine if it addresses the current needs of the society and properly addresses the vision/mission statement. While the vision/mission statement states that the comprehensive plan will address the elderly needs, it does not have any element within the comprehensive plan that supports the needs of seniors. Of the missing components in the Manhattan Urban Area Comprehensive Plan, the most

conspicuous is the “Mobility Option” resulting from the city’s inappropriate sidewalk conditions and absence of public transportation. To be noted is that the “Mobility Option” is identified as “the first and foremost” important element for seniors when aging in place. Without being mobile, seniors cannot attend to daily needs such as grocery, shopping and recreational activity, healthcare visits etc. Mobility appears even more important for the boomers because even if they are physically disabled due to age, they are still more enthusiastic and eager to work. Policies that support appropriate mobility options with proper infrastructure development are essential parts of the current planning process to connect seniors from home to other places according to their needs. The review of Manhattan Urban Area Comprehensive Plan discovered “Elderly Accommodation” missing from the planning process.

Therefore, to make the research viable and provide policy guidelines to support elderly accommodation in the planning process different policies were taken from a series of literature reviews. Then a complete set of policy guidelines under different headings of the comprehensive plan such as land use section, housing section, transportation and mobility section were outlined that will help in making the community livable for elderly citizens. The outlined policies suggest a new development that promotes a mixed-used development strategy with a variety of housing types and a walkable neighborhood for seniors wanting to age in their current community. The policy also suggests safe and efficient walkable neighborhoods having proper walkways that supports movement of people and wheelchairs and the sitting of day-to-day needs within walking distance. Benches along walkways and proper slope and grade of sidewalks are essential in promoting accessibility to the elderly. In addition to policies that address new or future issues, the policies that address issues of the existing community are also identified such as making a

new mixed-use development next to old communities and proving accessibility to daily needs from older neighborhoods to the newer neighborhoods. In the case where it is not possible to connect old neighborhoods with a mixed-use development, promoting efficient mass transit systems connecting the neighborhoods to other places is the best option. Suggestions like making mass transit services more flexible and customer-responsive or providing a para-transit service (e.g., van, taxi) independent of or supplemental to a fixed route transit system are outlined to promote the mobility of the elderly.

Overall, the policy guidelines outlined in this report are intended to help planners and policymakers incorporate elderly elements in the comprehensive plan. As was noted above, most communities have failed to pay proper attention to elderly needs in their comprehensive plan. However, the elderly are going to become the majority of the population in every community in the near future. Thus, elderly accommodation in the planning process is crucial, the policy guidelines mentioned here will direct planners, and policymakers to identify the elements in the planning process that will help facilitate elderly accommodation and make the communities livable for all age groups.

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